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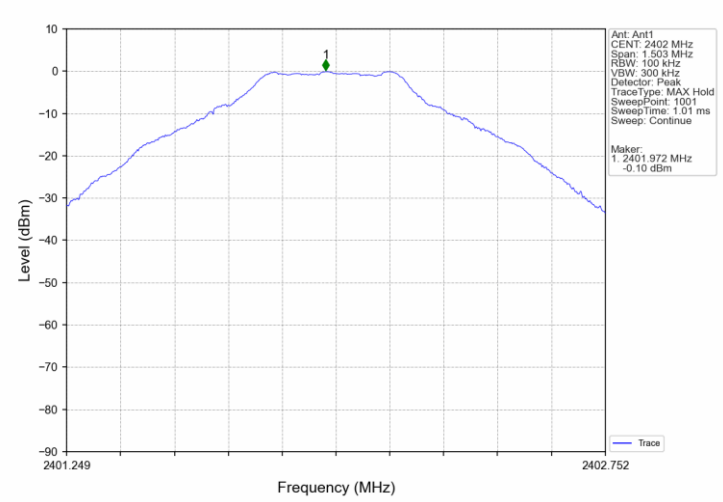

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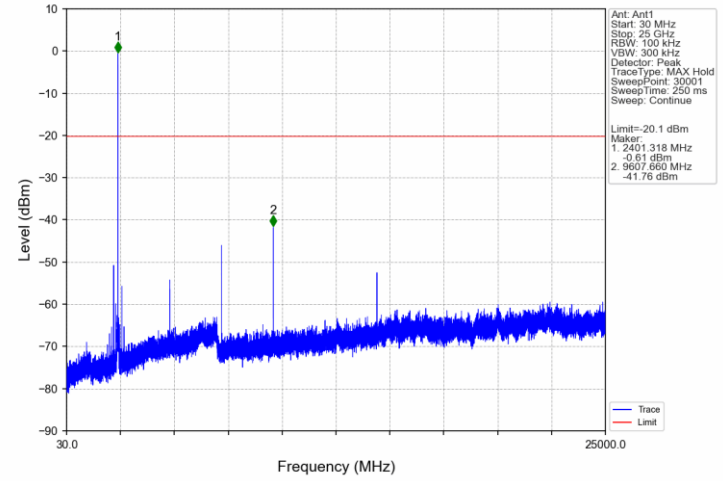

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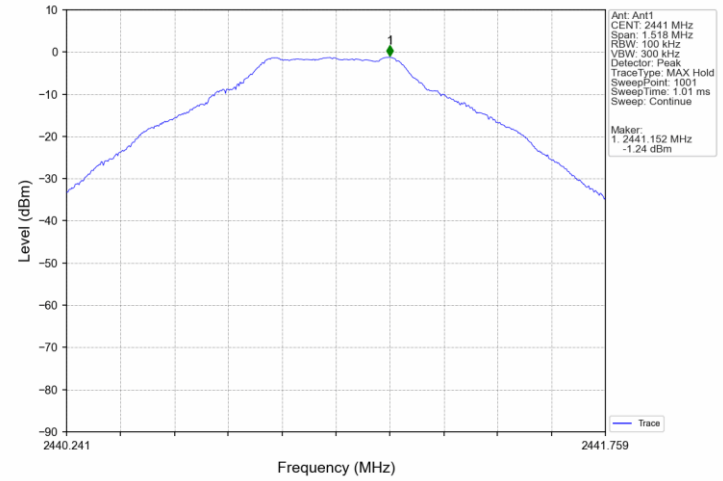

DH5_Ant1_2441_30~25000

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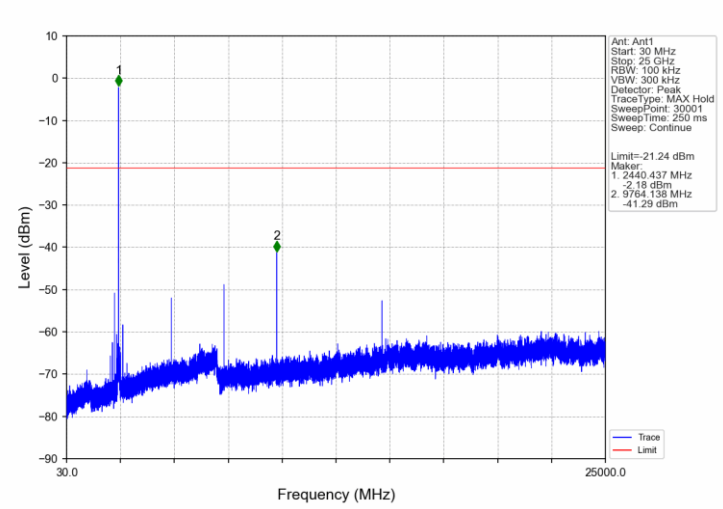

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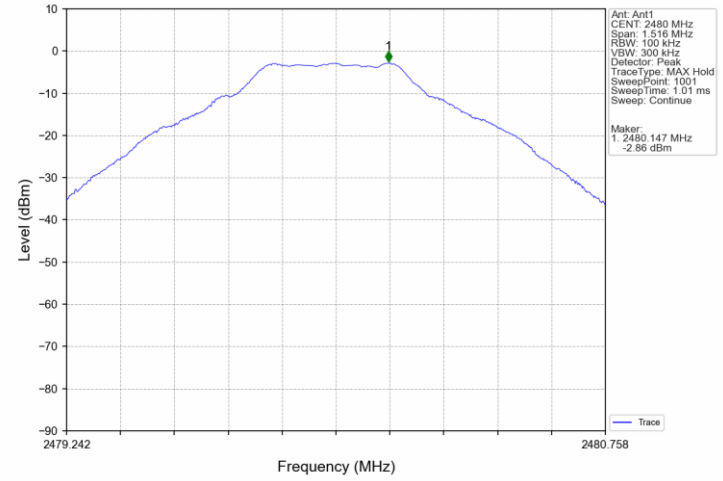

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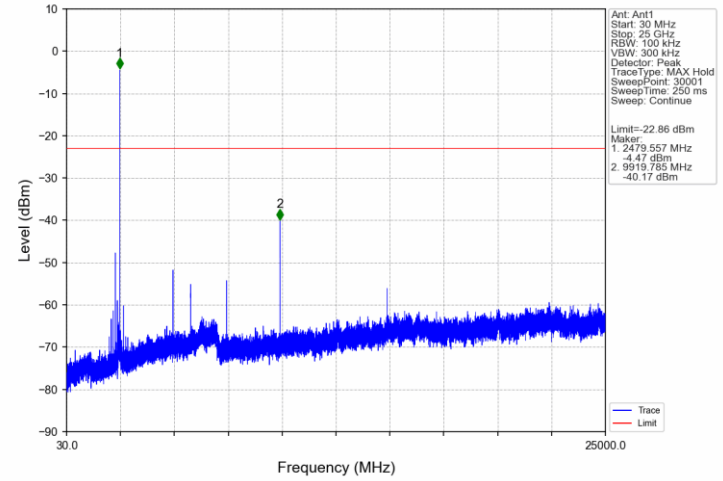

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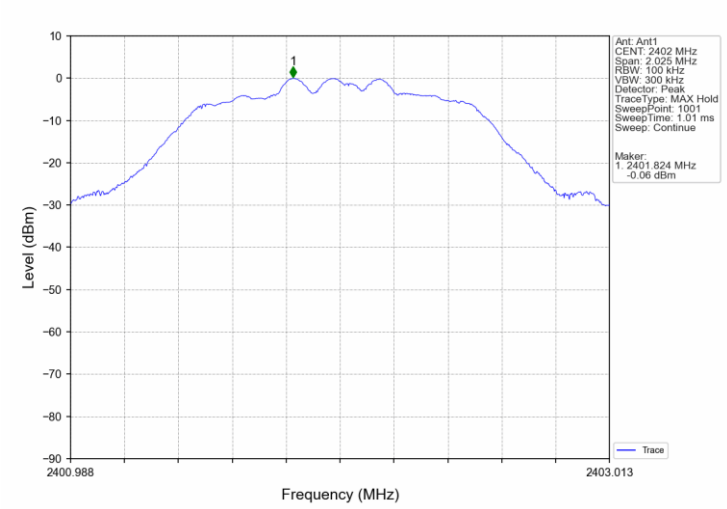

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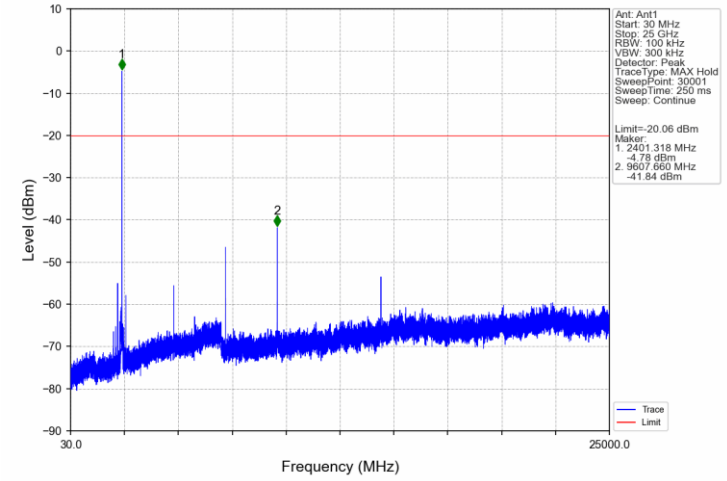

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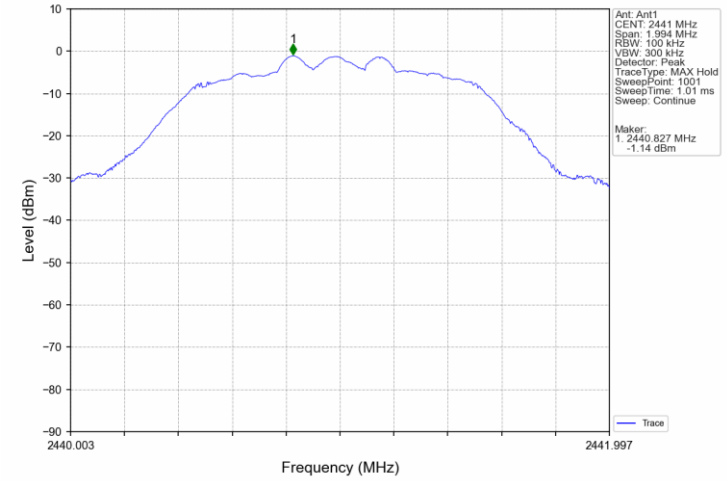

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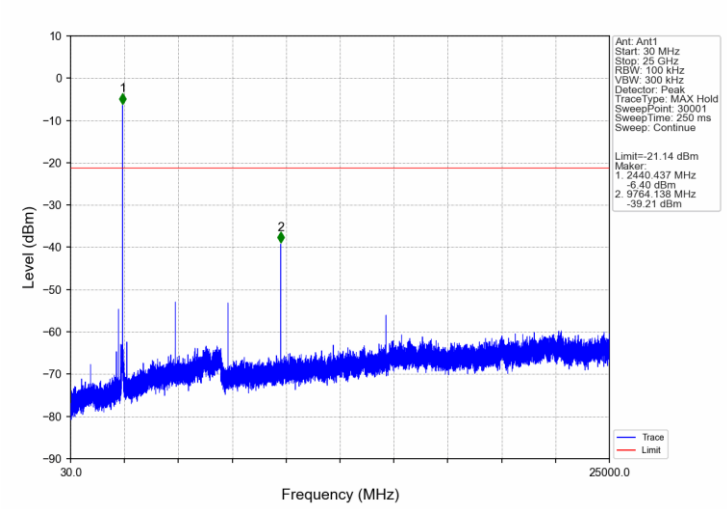

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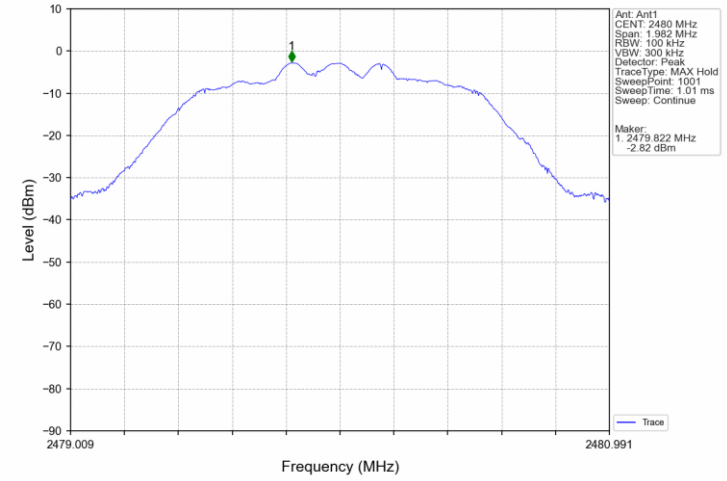

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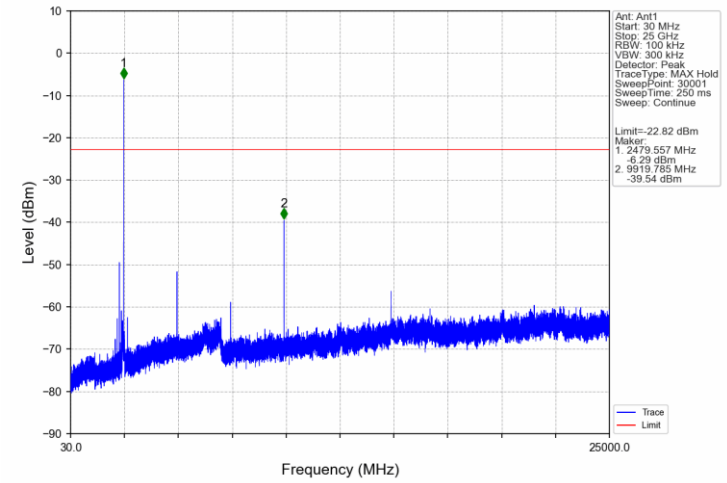

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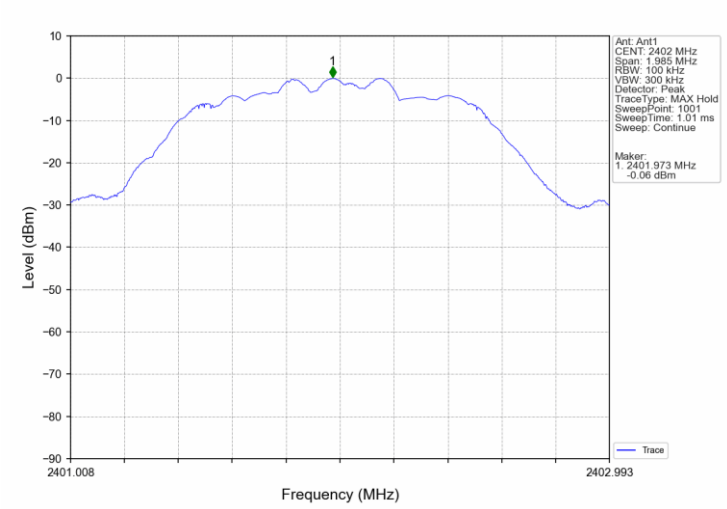

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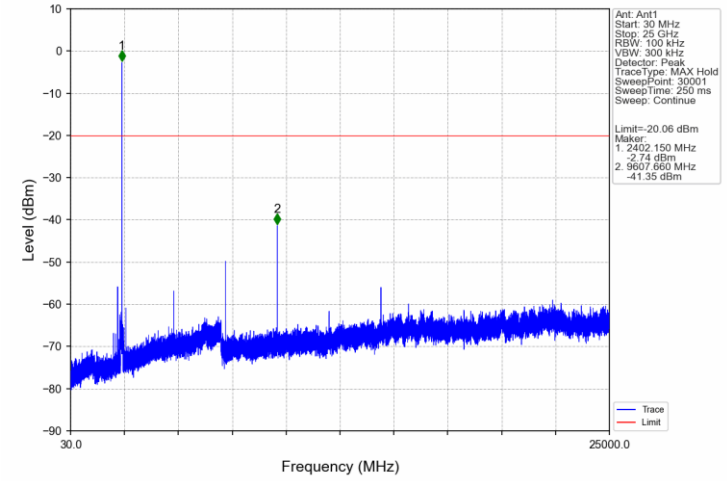

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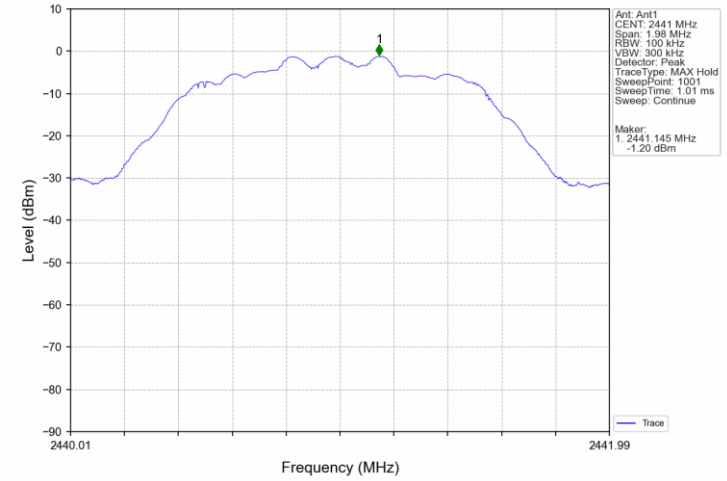

3DH5_Ant1_2441_30~25000

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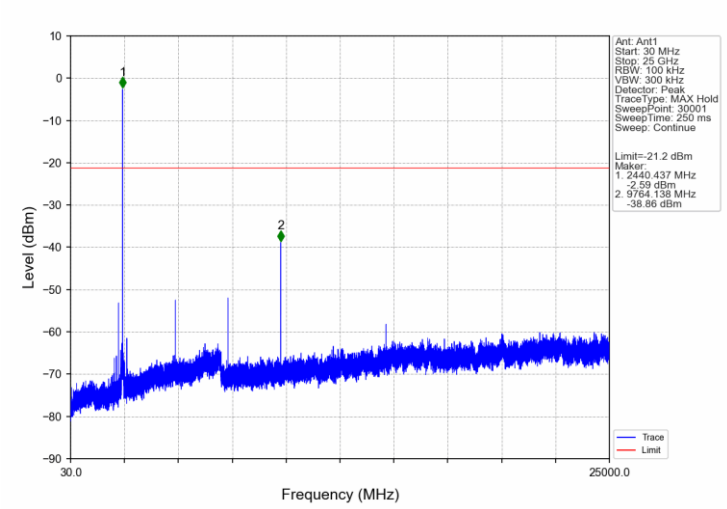

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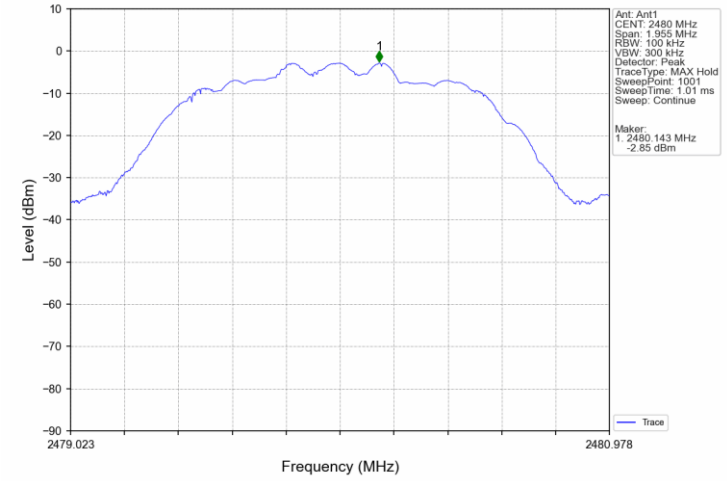

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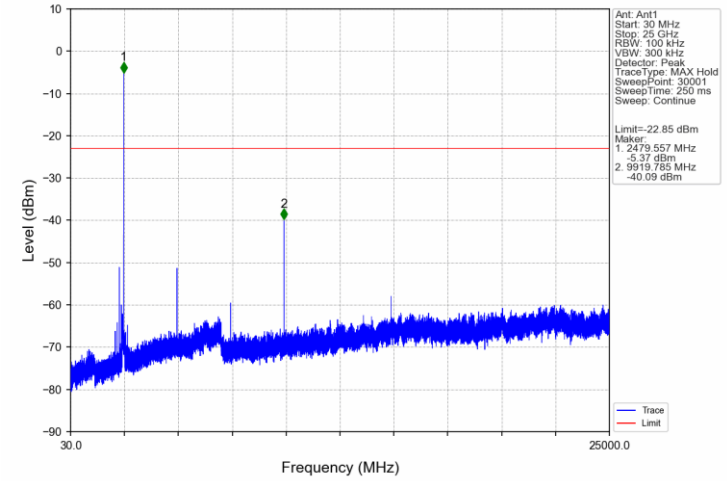

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9.8 Band Edge Testing

Test Method

1. The RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously. Set the EUT to the lowest frequency channel.
3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector, Trace: Max hold, Sweep time: Coupled, Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation. Allow the trace to stabilize.
4. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, and then use the marker-to-peak function to move the marker to the peak of the in-band emission.
5. Set the EUT to the highest frequency channel and repeat step 2) to 4)
6. Enable the EUT hopping mode, repeat the test.

Limit:

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

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Band Edge

Ref:

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-0.10
		2441	DH5	1	-1.24
		2480	DH5	1	-2.86
		HOPP	DH5	1	-0.17
					-0.17
Pi/4DQPSK	SISO	2402	2DH5	1	-0.06
		2441	2DH5	1	-1.14
		2480	2DH5	1	-2.82
		HOPP	2DH5	1	-0.04
					-0.04
8DPSK	SISO	2402	3DH5	1	-0.06
		2441	3DH5	1	-1.20
		2480	3DH5	1	-2.85
		HOPP	3DH5	1	0.13
					0.13
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.					

CSE:

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	-0.10	-20.10	Pass
		2441	DH5	1	-1.24	-21.24	Pass
		2480	DH5	1	-2.86	-22.86	Pass
		HOPP	DH5	1	-0.17	-20.17	Pass
					-0.17	-20.17	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	-0.06	-20.06	Pass
		2441	2DH5	1	-1.14	-21.14	Pass
		2480	2DH5	1	-2.82	-22.82	Pass
		HOPP	2DH5	1	-0.04	-20.04	Pass
					-0.04	-20.04	Pass
8DPSK	SISO	2402	3DH5	1	-0.06	-20.06	Pass
		2441	3DH5	1	-1.20	-21.20	Pass
		2480	3DH5	1	-2.85	-22.85	Pass
		HOPP	3DH5	1	0.13	-19.87	Pass
					0.13	-19.87	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.							

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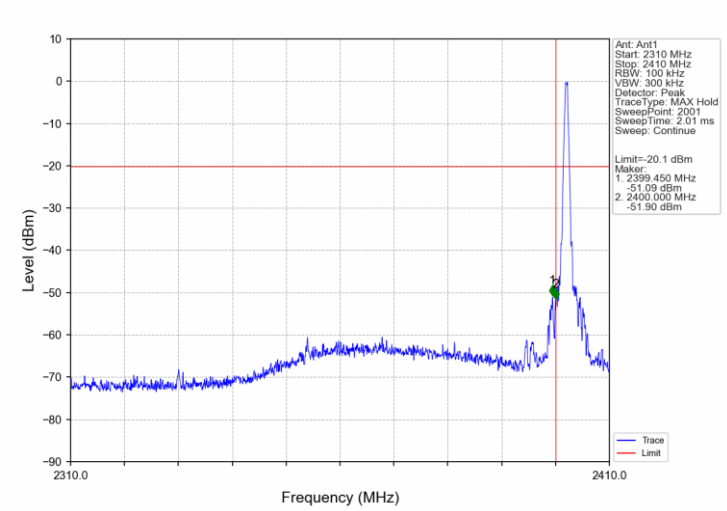
DH5_Ant1_Low_2402



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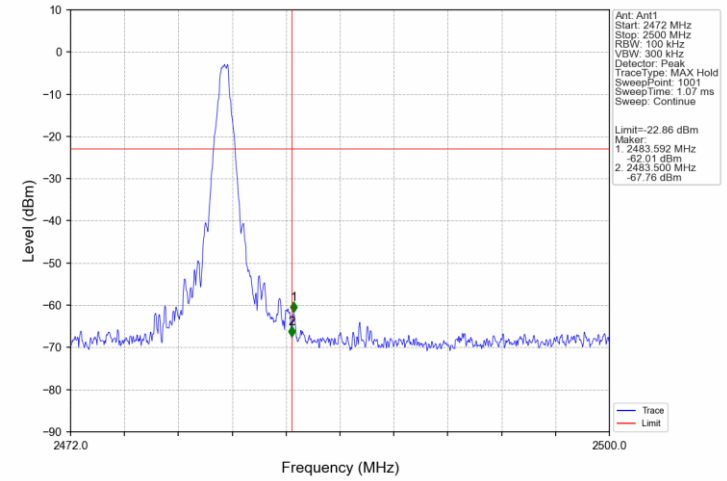
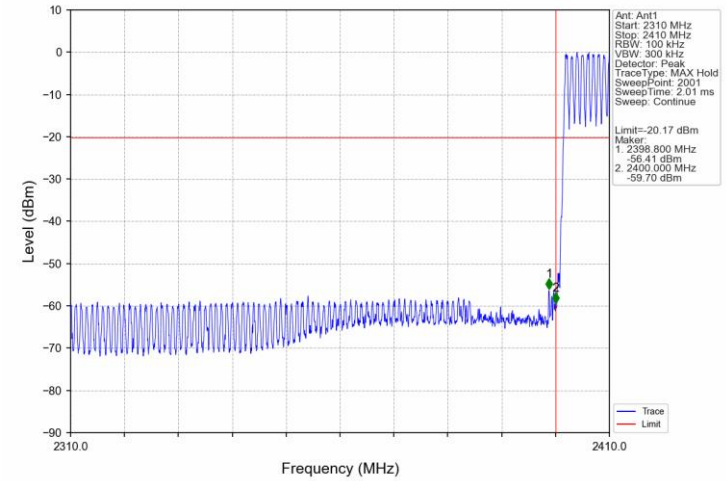


DH5_Ant1_Low_Hop_2402



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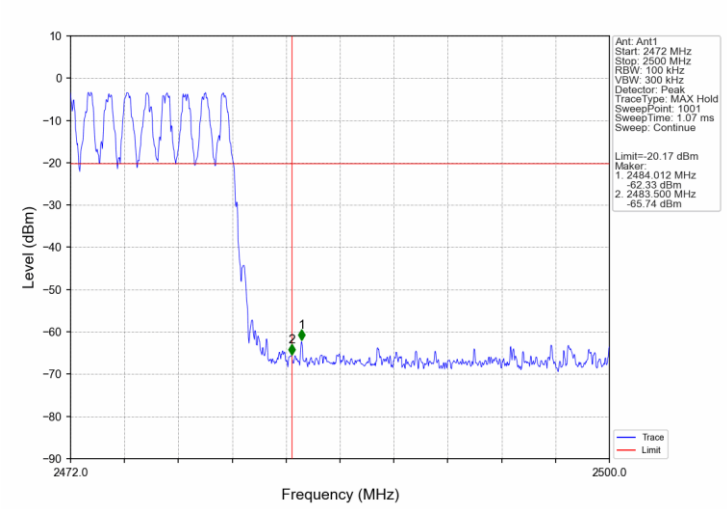
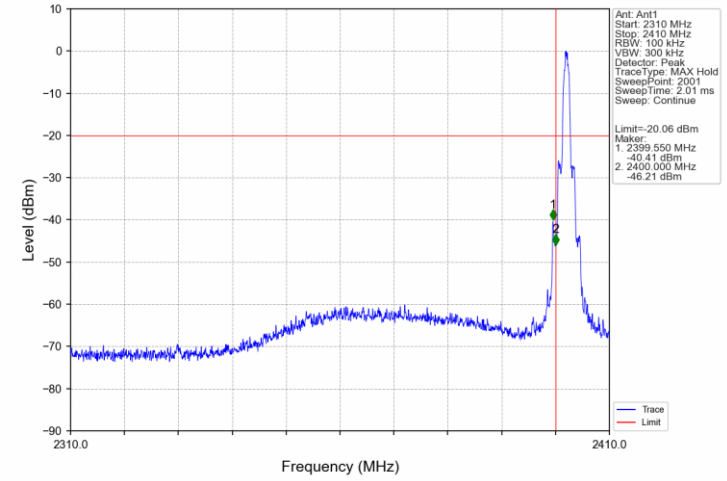


2DH5_Ant1_Low_2402



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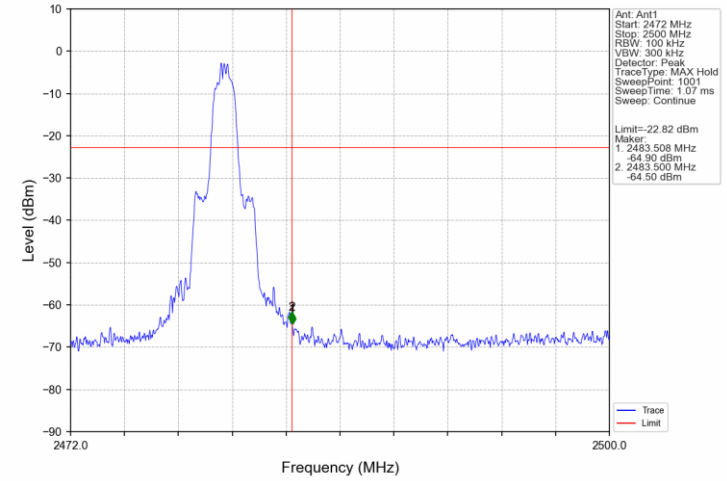

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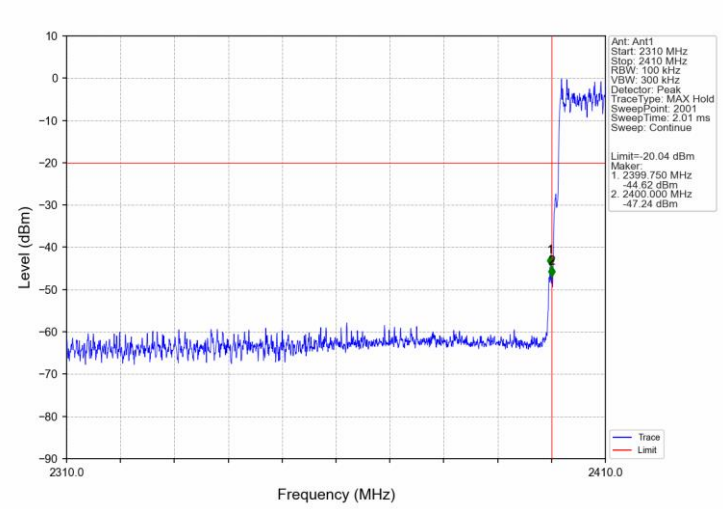

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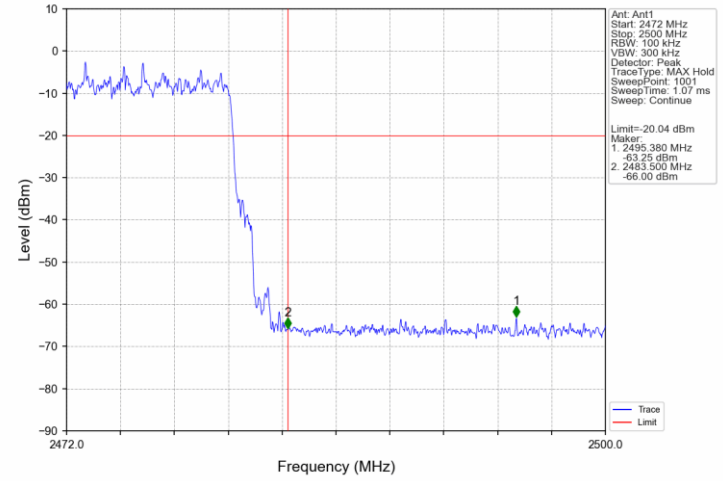

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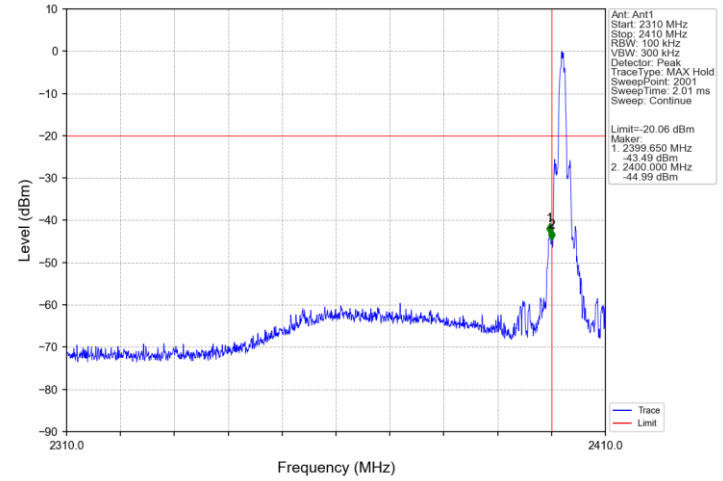

3DH5_Ant1_High_2480

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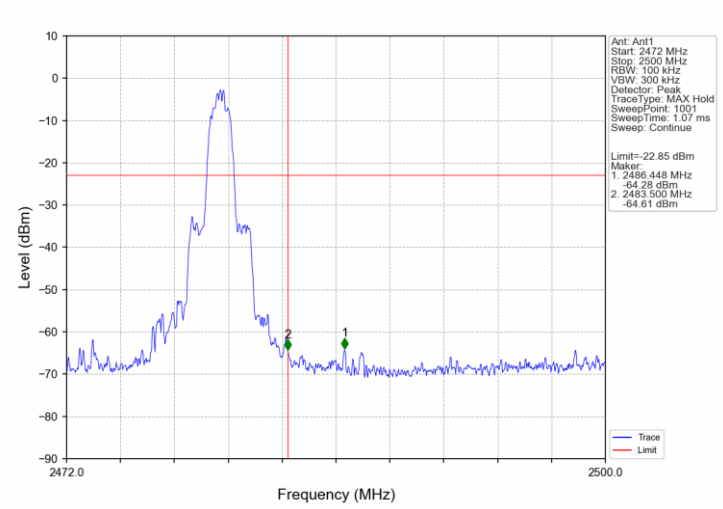
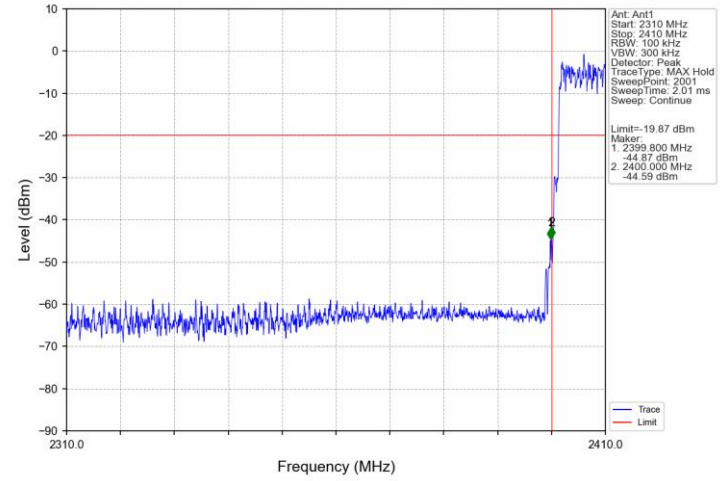
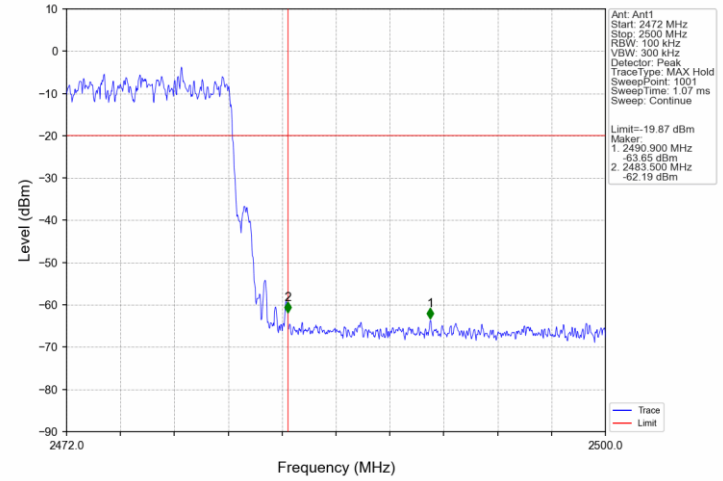


3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



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9.9 Spurious Radiated Emissions for Transmitter

Test Method

1. The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meters chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
4. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
5. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
6. Use the following test receiver settings According to C63.10:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz to 120KHz for f < 1 GHz; VBW≥ RBW; Sweep = auto; Detector function = QP; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥1 GHz for peak measurement.
   For average measurement:
   The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (20log(1/duty cycle)).
   The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
7. Repeat above procedures until all frequencies measured were complete.

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Spurious Radiated Emissions for Transmitter

Limit

The radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section15.205 & RSS-GEN 8.10, must comply with the radiated emission limits specified in section 15.209 & RSS-Gen 6.13.

Frequency MHz	Field Strength μV/m	Field Strength dBμV/m	Detector	Measurement distance meters
0.009-0.490	2400/F(kHz)	48.5-13.8	AV	300
0.490-1.705	24000/F(kHz)	33.8-23.0	QP	30
1.705-30	30	29.5	QP	30
30-88	100	40	QP	3
88-216	150	43.5	QP	3
216-960	200	46	QP	3
960-1000	500	54	QP	3
Above 1000	500	54	AV	3
Above 1000	5000	74	PK	3

Note 1: Limit 3m(dBμV/m)=Limit 300m(dBμV/m)+40Log(300m/3m) (Below 30MHz)
Note 2: Limit 3m(dBμV/m)=Limit 30m(dBμV/m)+40Log(30m/3m) (Below 30MHz)

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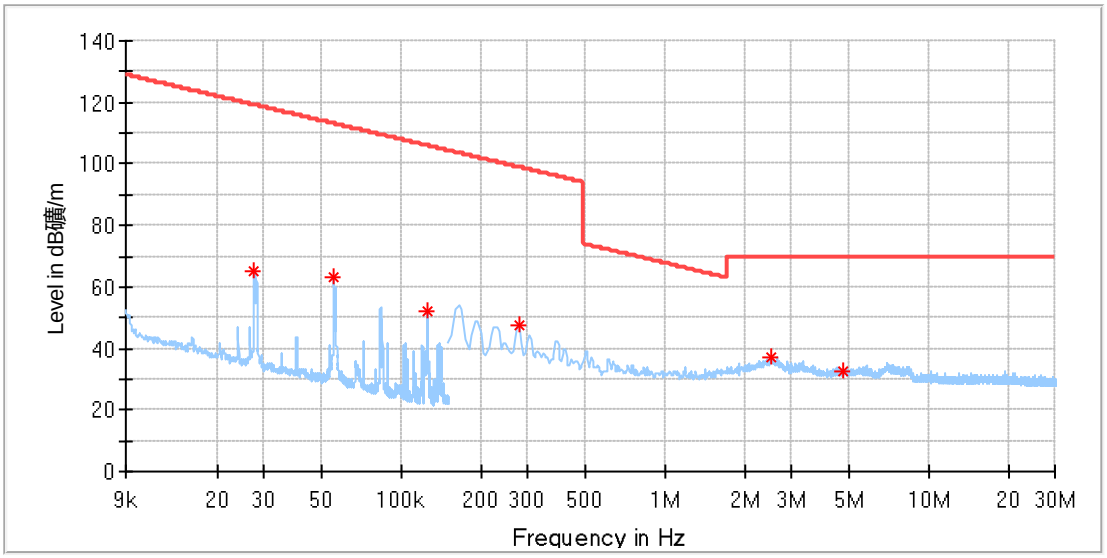
Spurious radiated emissions for transmitter

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

The only worse case test result is listed in the report.

Transmitting spurious emission test result as below:

FCC Test data_9KHz to 30MHz:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
0.027706	64.90	119.15	54.25	H	117.0	19.88	---
0.055577	62.88	113.06	50.18	H	165.0	19.92	---
0.124620	51.79	105.99	54.20	H	277.0	19.92	---
0.279350	47.62	98.92	51.30	H	155.0	19.90	---
2.503175	37.28	70.00	32.72	H	44.0	20.14	---
4.751875	32.74	70.00	37.26	H	224.0	20.15	---

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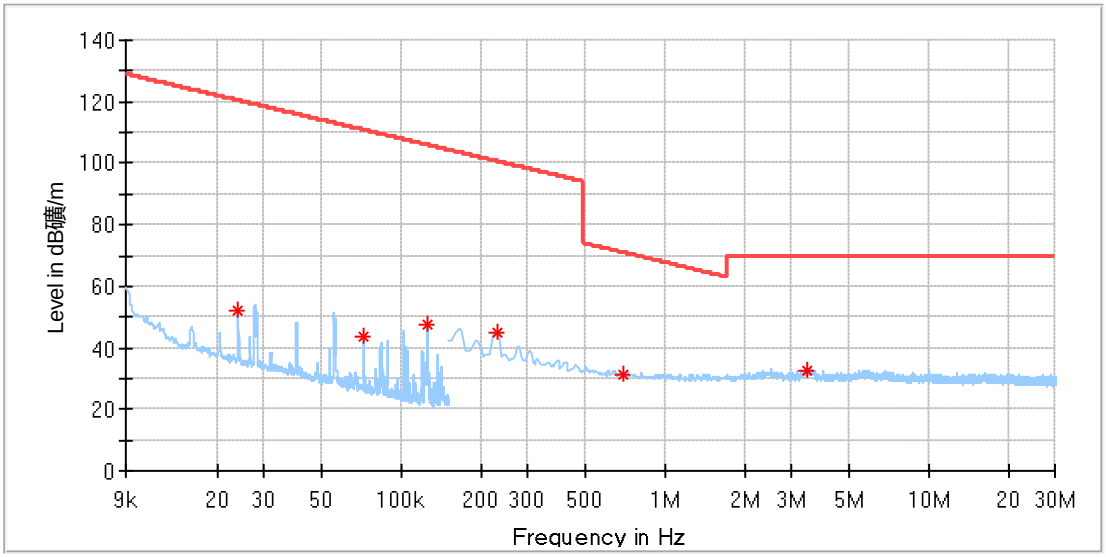

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
0.023993	52.18	120.41	68.23	V	0.0	19.87	---
0.071980	43.70	110.79	67.09	V	0.0	19.91	---
0.124573	47.32	105.99	58.68	V	352.0	19.92	---
0.229600	44.96	100.64	55.68	V	355.0	19.88	---
0.687300	31.54	71.02	39.47	V	342.0	19.92	---
3.453400	32.45	70.00	37.55	V	334.0	20.13	---

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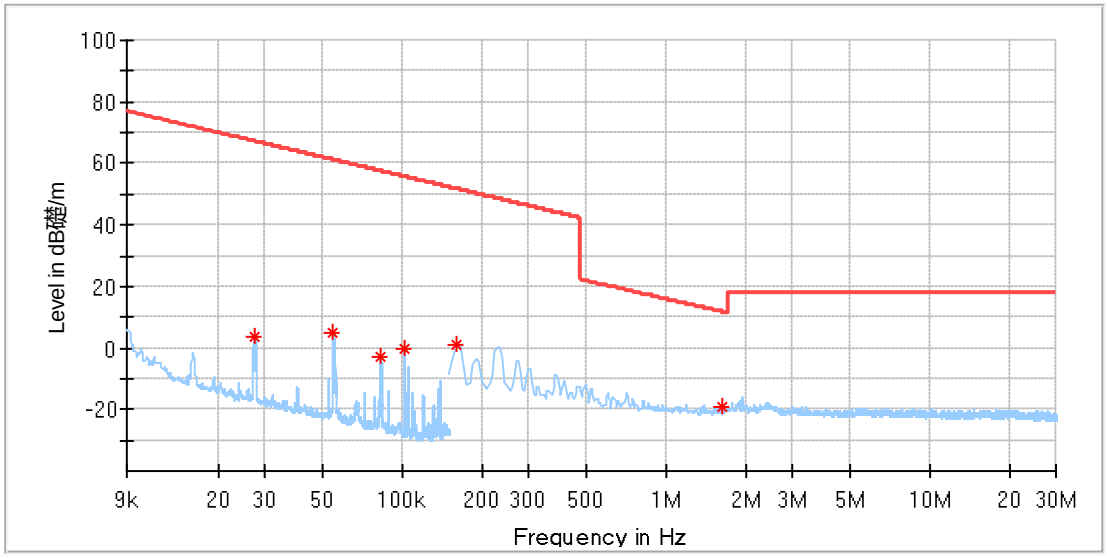
IC Test data_9KHz to 30MHz:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)
0.027330	3.44	67.25	63.80	H	34.0	-31.66
0.054684	4.65	61.16	56.50	H	245.0	-31.61
0.082132	-2.70	57.59	60.28	H	355.0	-31.61
0.101355	-0.31	55.74	56.05	H	106.0	-31.60
0.159950	1.19	51.73	50.54	H	77.0	-31.63
1.632550	-18.96	11.73	30.69	H	358.0	-31.52

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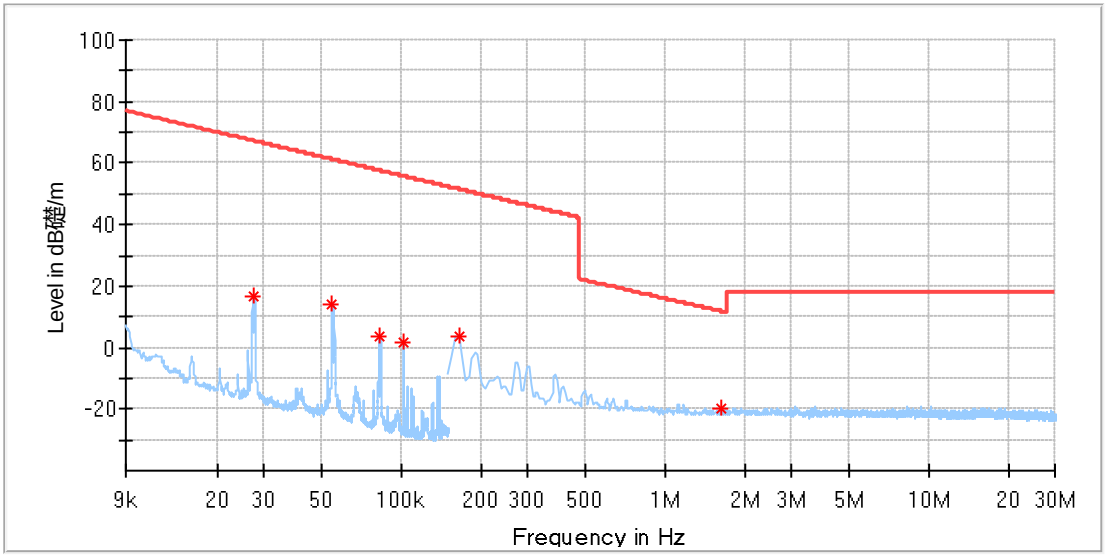

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)
0.027377	16.51	67.23	50.72	V	333.0	-31.66
0.054731	13.84	61.15	47.31	V	225.0	-31.61
0.082085	3.39	57.59	54.20	V	288.0	-31.61
0.101308	1.48	55.74	54.26	V	137.0	-31.60
0.164925	3.40	51.46	48.07	V	274.0	-31.64
1.642500	-19.85	11.68	31.52	V	266.0	-31.52

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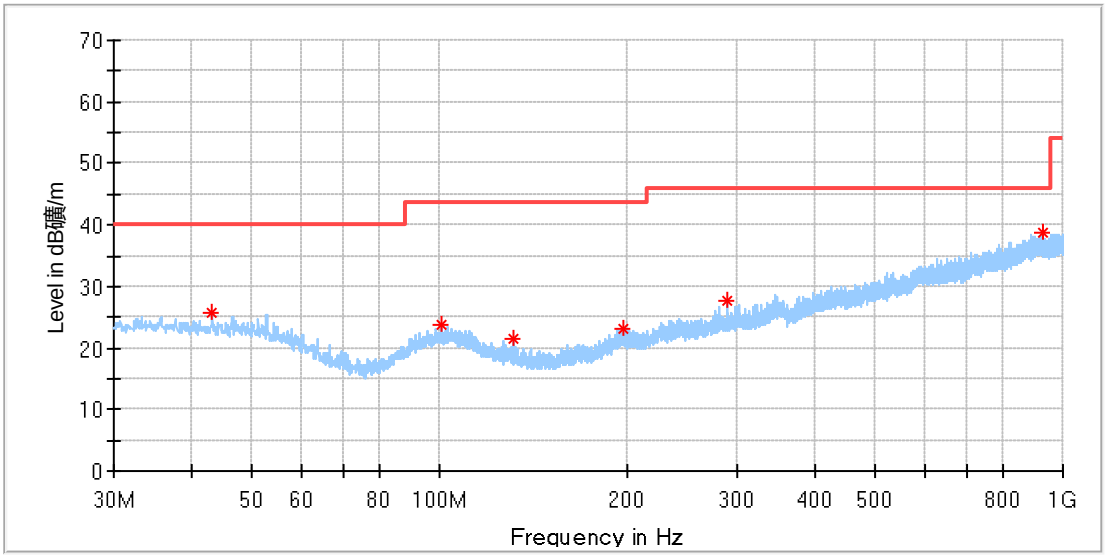
Test data_30MHz to 1000MHz:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.155625	25.58	40.00	14.42	200.0	H	0.0	21.25
100.385625	23.66	43.50	19.84	200.0	H	0.0	20.01
131.607500	21.34	43.50	22.16	200.0	H	152.0	16.15
197.143125	23.11	43.50	20.39	200.0	H	264.0	18.99
290.263125	27.64	46.00	18.36	200.0	H	126.0	21.40
928.583750	38.73	46.00	7.27	200.0	H	178.0	32.44

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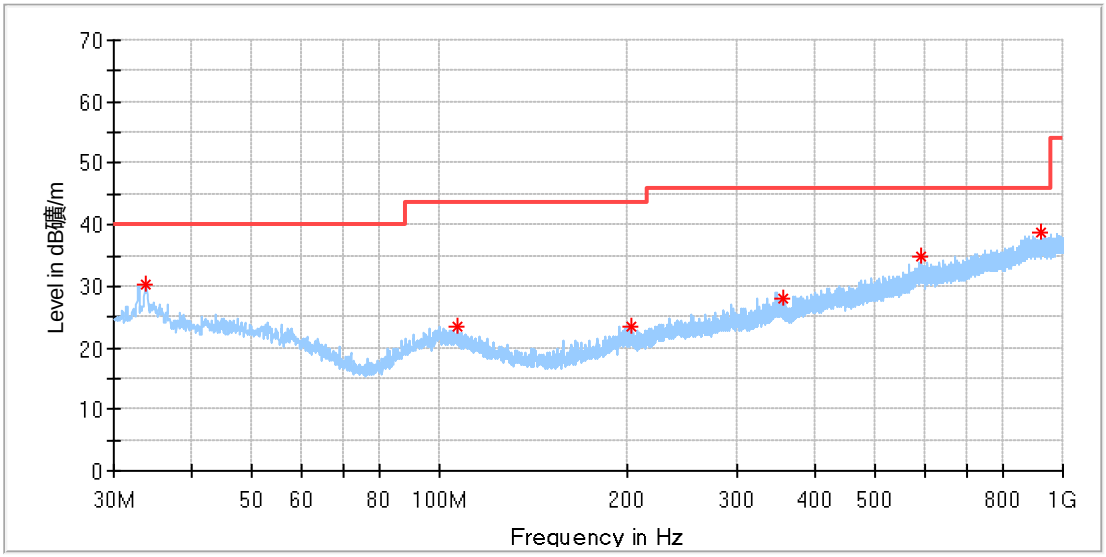
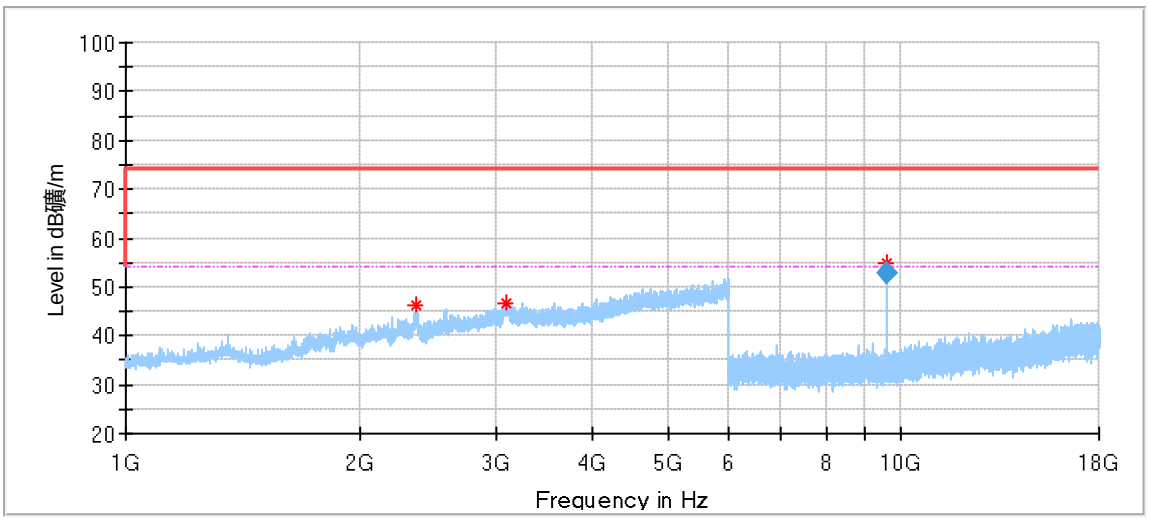


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.880000	30.33	40.00	9.67	100.0	V	0.0	20.95
107.175625	23.38	43.50	20.12	100.0	V	0.0	19.50
203.387500	23.52	43.50	19.98	100.0	V	0.0	18.62
355.980625	28.07	46.00	17.93	100.0	V	0.0	23.34
591.266250	34.83	46.00	11.17	100.0	V	0.0	28.25
921.126875	38.78	46.00	7.22	100.0	V	0.0	32.44

Test data 1GHz to 18GHz:
DH5_Low Channel:

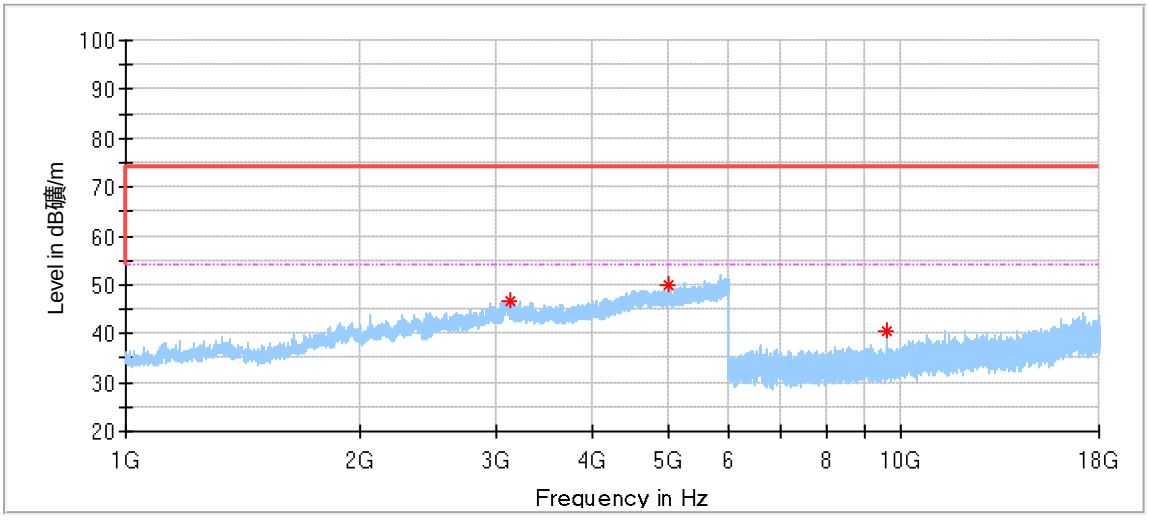


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2368.500000	46.17	74.00	27.83	150.0	H	304.0	-2.65
3095.000000	46.65	74.00	27.35	150.0	H	168.0	1.39
9608.500000	54.90	74.00	19.10	150.0	H	288.0	8.07

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9608.500000	52.86	54.00	1.14	150.0	H	288.0	8.07



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3127.000000	46.67	74.00	27.33	150.0	V	15.0	0.53
5011.000000	49.92	74.00	24.08	150.0	V	165.0	4.46
9607.500000	40.35	74.00	33.65	150.0	V	4.0	8.07

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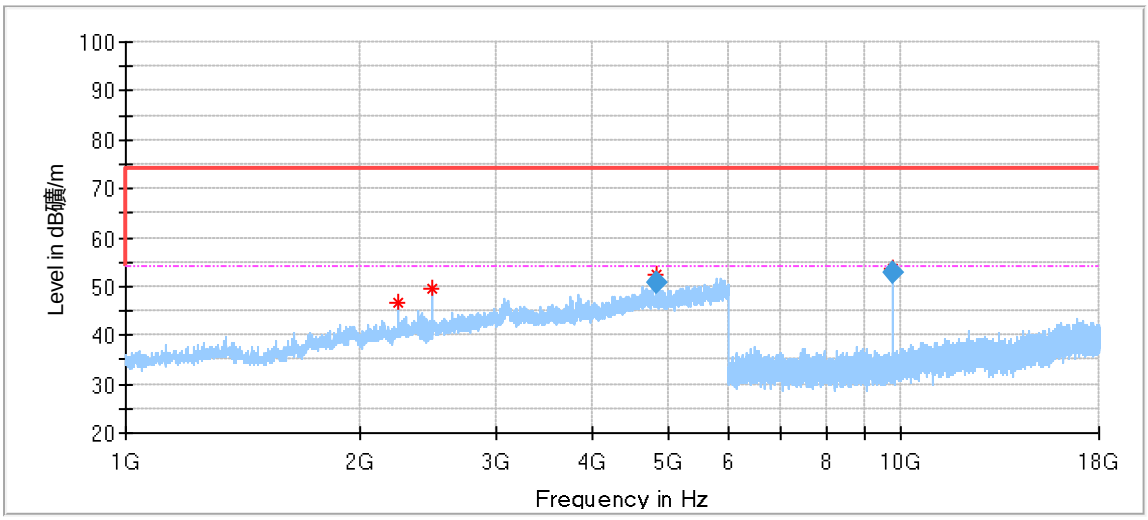
DH5_Middle Channel:

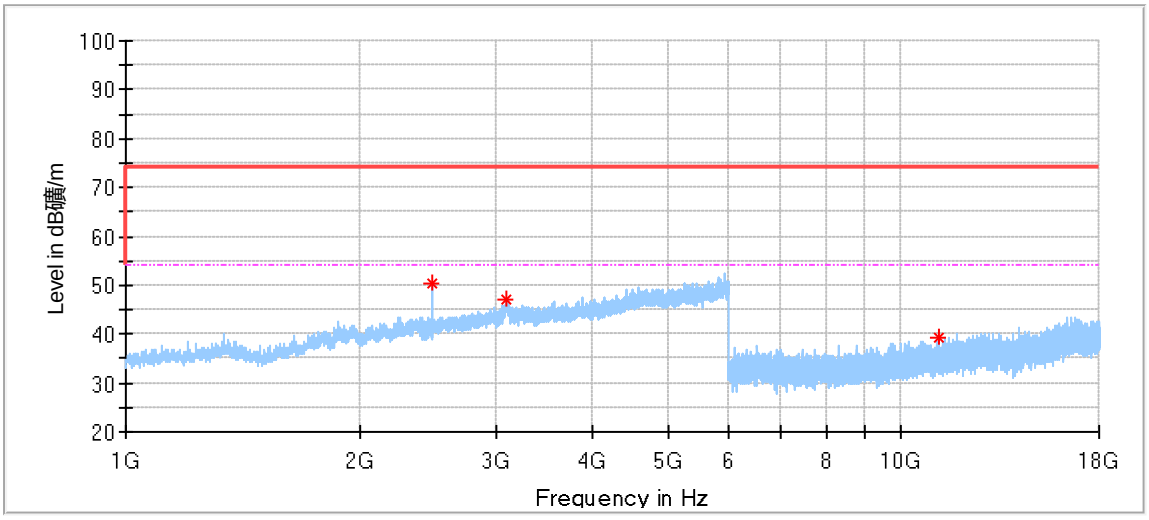


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2249.000000	46.73	74.00	27.27	150.0	H	221.0	-3.14
2479.500000	49.47	74.00	24.53	150.0	H	265.0	-2.40
4843.500000	52.40	74.00	21.60	150.0	H	84.0	4.24
9764.000000	53.65	74.00	20.35	150.0	H	288.0	8.16

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4843.500000	50.88	54.00	3.12	150.0	H	84.0	4.24
9764.000000	52.97	54.00	1.03	150.0	H	288.0	8.16



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2480.000000	50.41	74.00	23.59	150.0	V	3.0	-2.40
3104.000000	47.24	74.00	26.76	150.0	V	87.0	1.44
11157.000000	39.09	74.00	34.91	150.0	V	321.0	9.96

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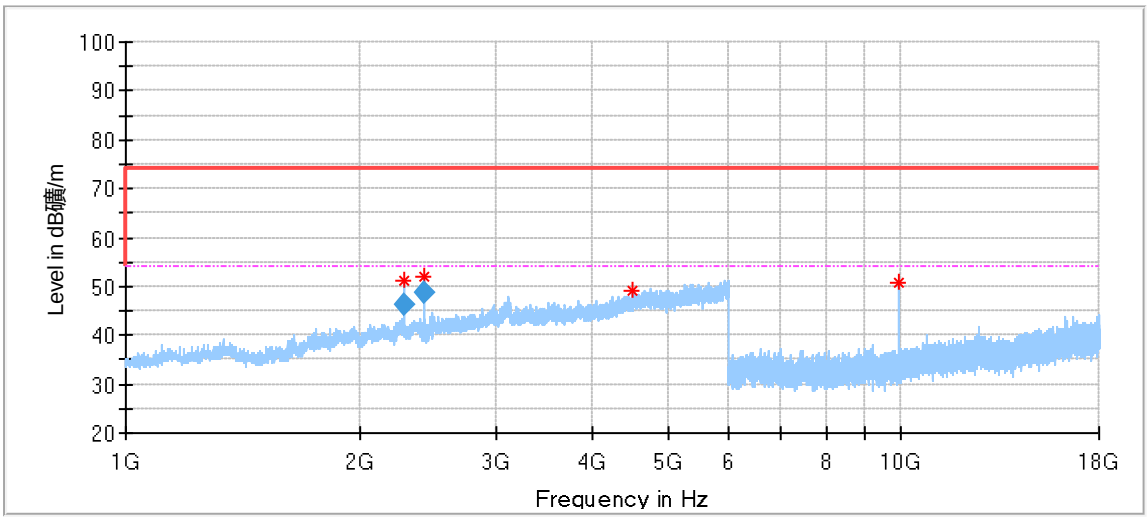
DH5_Hight Channel:

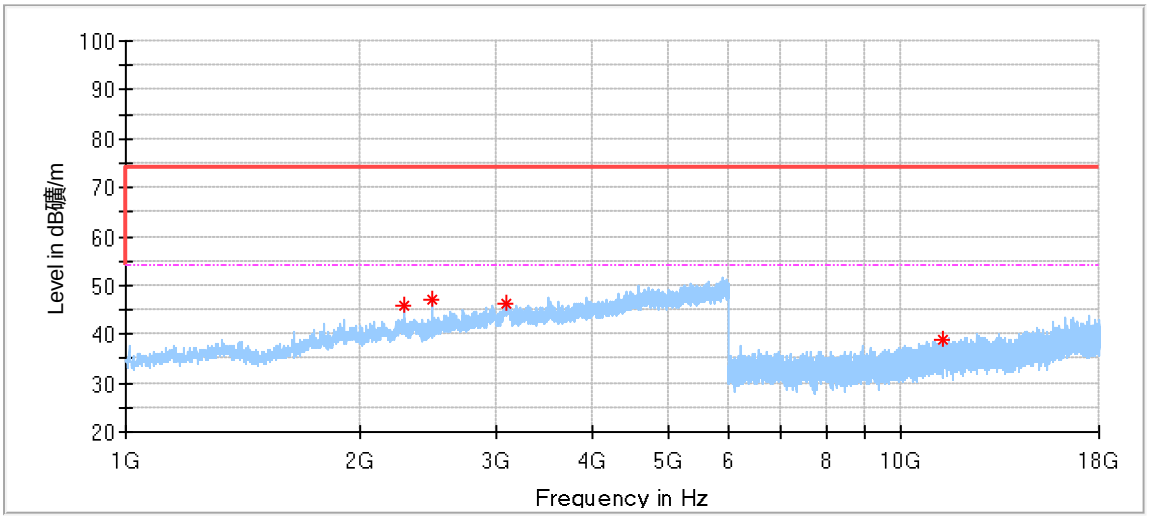


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2288.000000	51.32	74.00	22.68	150.0	H	204.0	-3.25
2426.000000	52.08	74.00	21.92	150.0	H	290.0	-2.30
4494.000000	49.19	74.00	24.81	150.0	H	303.0	3.43
9920.000000	50.65	74.00	23.35	150.0	H	299.0	8.35

Final_Result

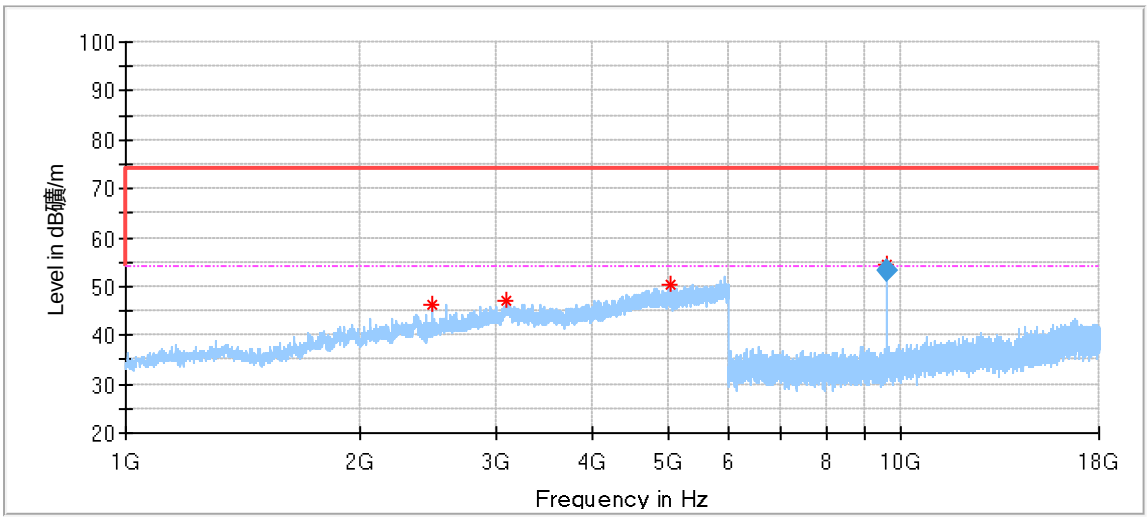
Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2288.000000	46.31	54.00	7.69	150.0	H	204.0	-3.25
2426.000000	48.82	54.00	5.18	150.0	H	290.0	-2.30



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2287.500000	46.03	74.00	27.97	150.0	V	222.0	-3.25
2479.500000	46.90	74.00	27.10	150.0	V	304.0	-2.40
3104.000000	46.32	74.00	27.68	150.0	V	8.0	1.44
11308.500000	39.04	74.00	34.96	150.0	V	260.0	10.23

3DH5_Low Channel:

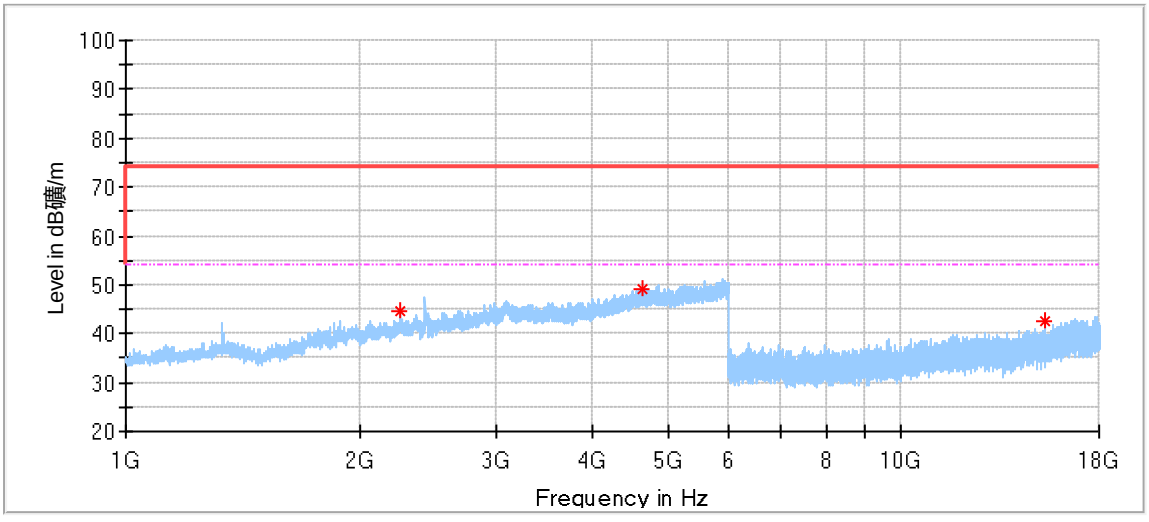


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2480.000000	46.11	74.00	27.89	150.0	H	291.0	-2.40
3100.000000	47.16	74.00	26.84	150.0	H	83.0	1.58
5036.000000	50.29	74.00	23.71	150.0	H	83.0	4.36
9608.000000	54.63	74.00	19.37	150.0	H	288.0	8.07

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9608.000000	53.17	54.00	0.83	150.0	H	288.0	8.07



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2261.500000	44.53	74.00	29.47	150.0	V	101.0	-3.00
4641.500000	49.07	74.00	24.93	150.0	V	128.0	4.27
15306.000000	42.58	74.00	31.42	150.0	V	265.0	13.43

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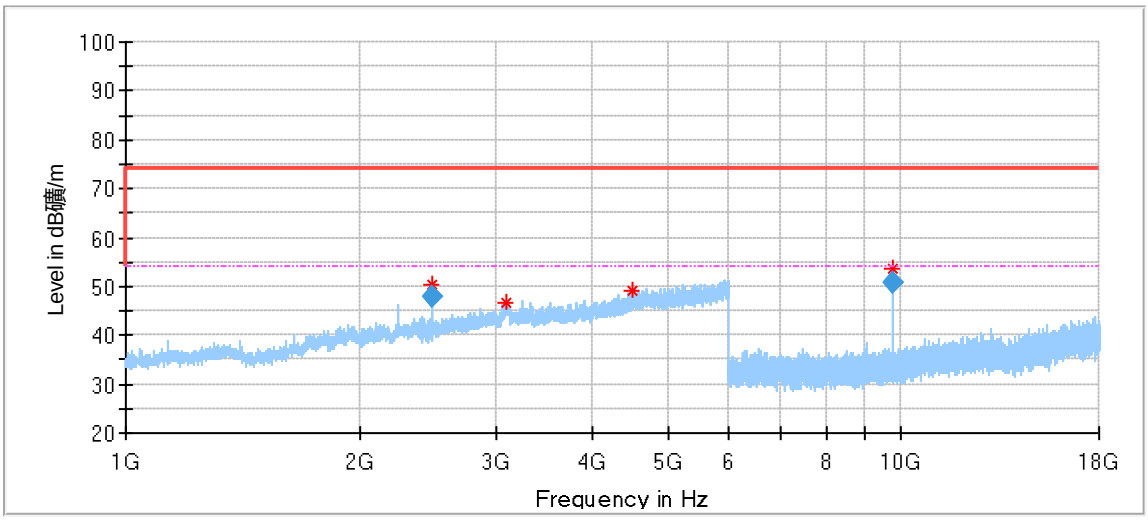
3DH5_Middle Channel:

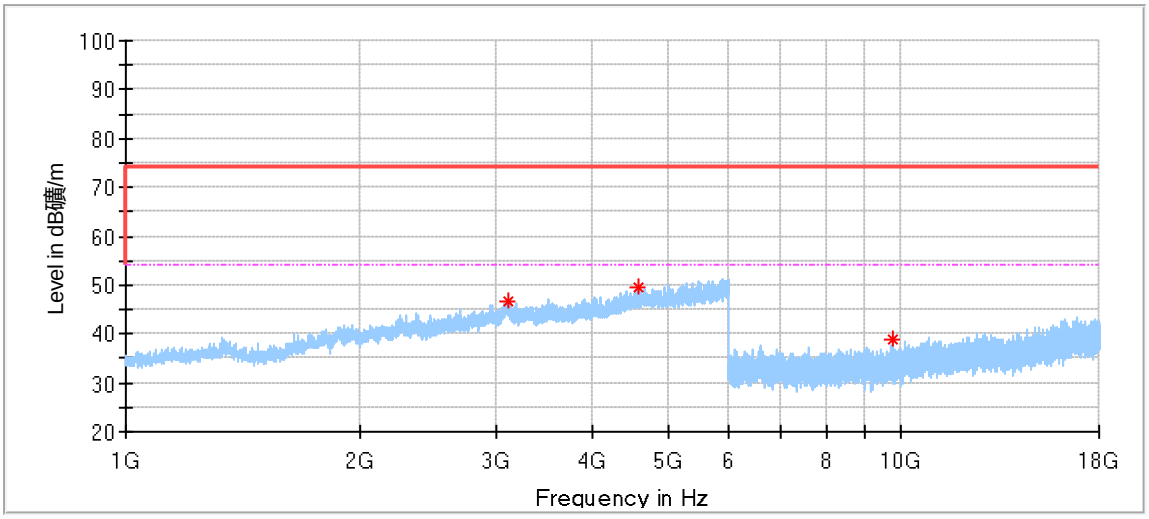


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2479.500000	50.33	74.00	23.67	150.0	H	16.0	-2.40
3094.000000	46.80	74.00	27.20	150.0	H	70.0	1.35
4507.000000	49.15	74.00	24.85	150.0	H	98.0	3.48
9764.000000	53.59	74.00	20.41	150.0	H	288.0	8.16

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2479.500000	48.02	54.00	5.98	150.0	H	16.0	-2.40
9764.000000	50.66	54.00	3.34	150.0	H	288.0	8.16



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3106.500000	46.73	74.00	27.27	150.0	V	274.0	1.36
4571.500000	49.36	74.00	24.64	150.0	V	260.0	3.87
9764.000000	38.72	74.00	35.28	150.0	V	359.0	8.16

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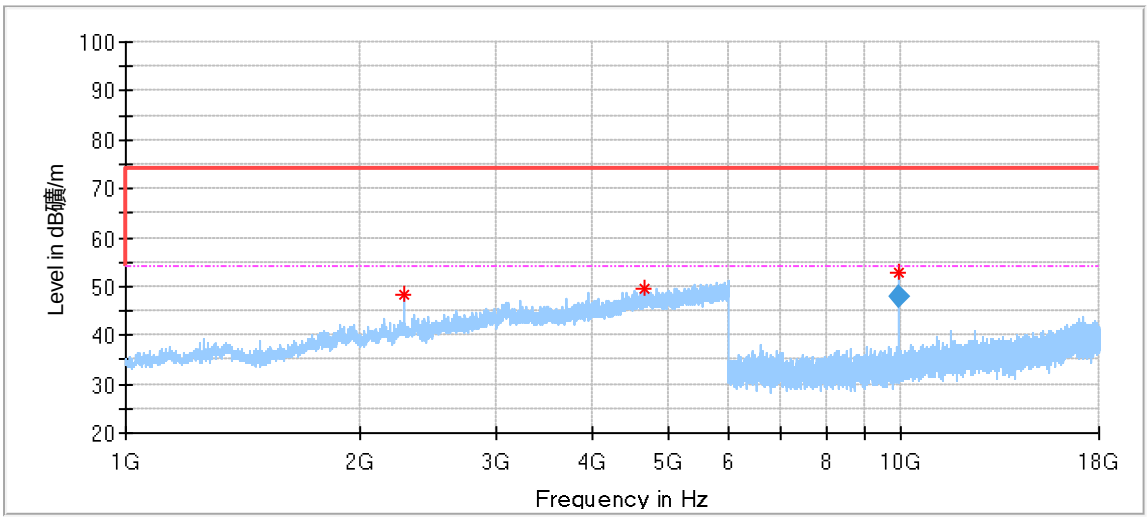
3DH5_Hight Channel:

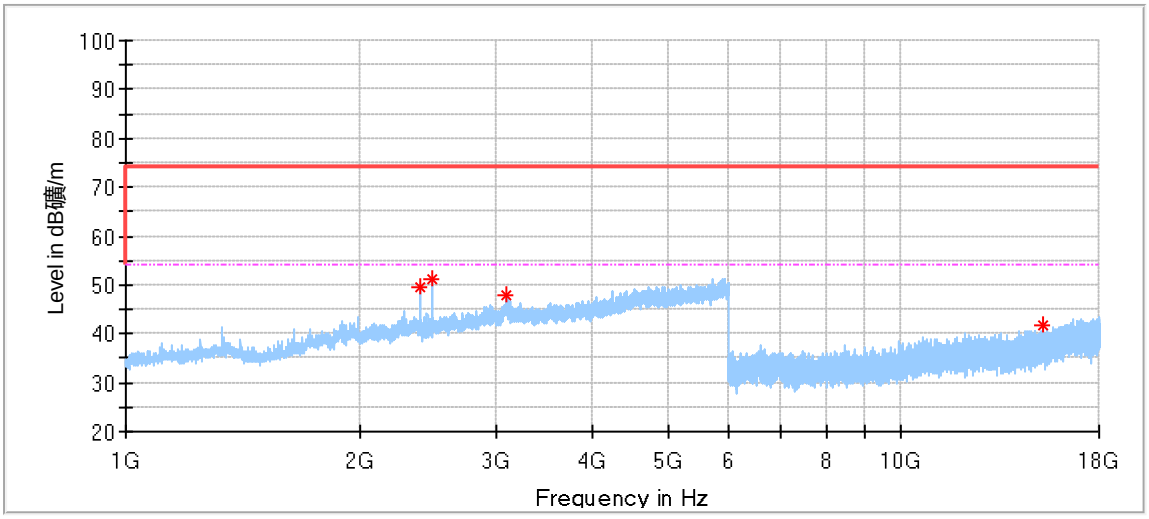


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2287.500000	48.46	74.00	25.54	150.0	H	306.0	-3.25
4670.000000	49.55	74.00	24.45	150.0	H	251.0	4.32
9920.000000	52.73	74.00	21.27	150.0	H	290.0	8.35

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9920.000000	48.04	54.00	5.96	150.0	H	290.0	8.35

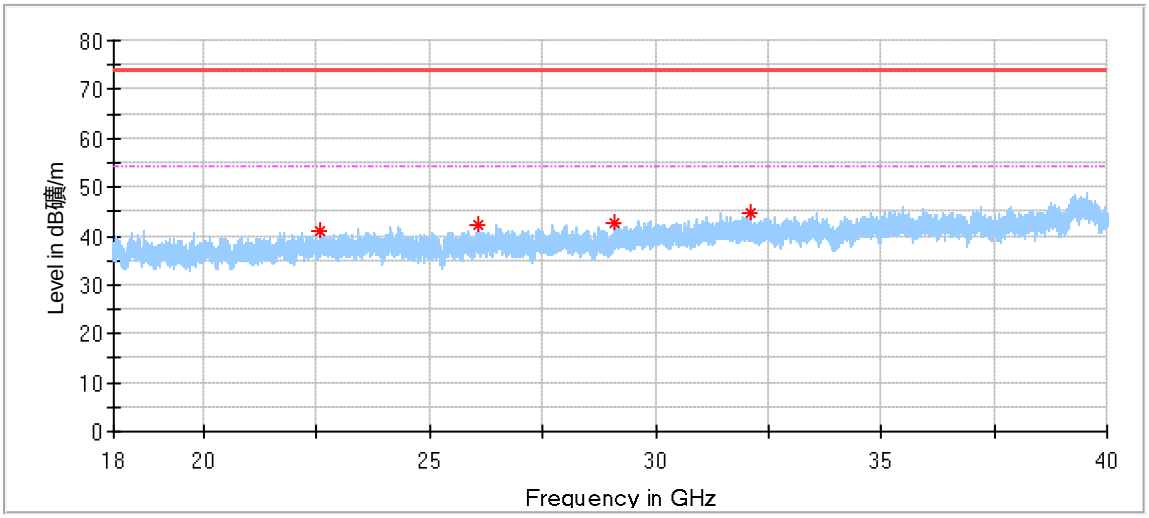


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2401.500000	49.70	74.00	24.30	150.0	V	247.0	-2.41
2479.500000	51.17	74.00	22.83	150.0	V	356.0	-2.40
3094.500000	47.74	74.00	26.26	150.0	V	137.0	1.37
15244.500000	41.82	74.00	32.18	150.0	V	291.0	13.34

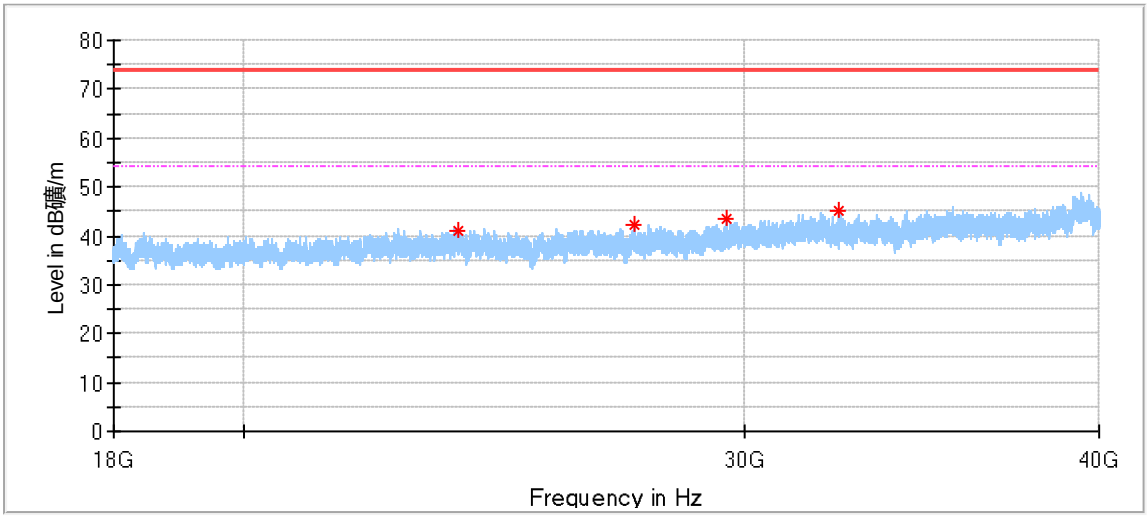
Test data 18GHz to 40GHz:

DH5_Low Channel:



Critical_Freqs

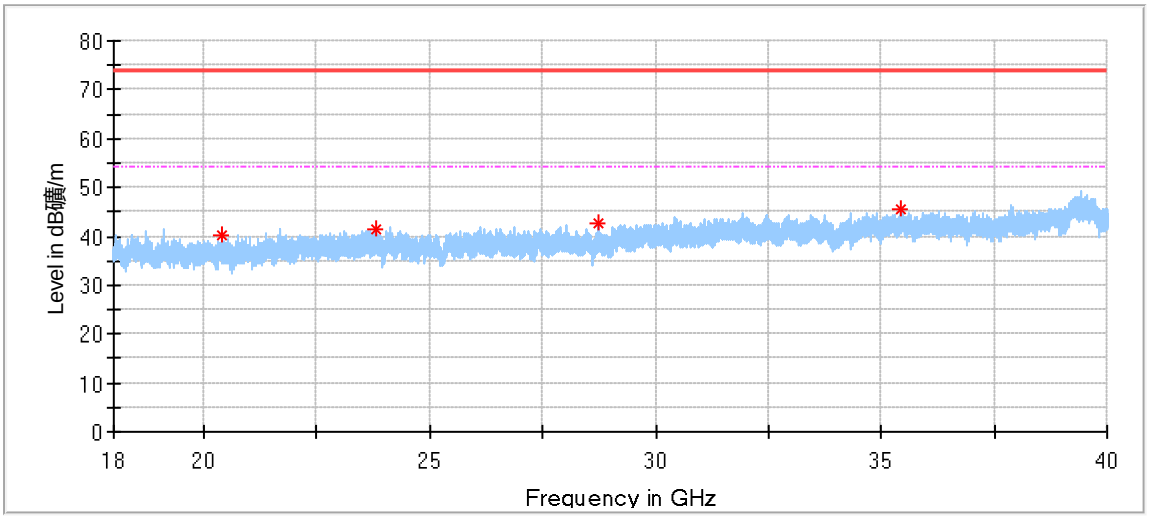
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
22577.375000	41.17	74.00	32.83	150.0	H	172.0	-0.80	---
26082.250000	42.08	74.00	31.92	150.0	H	0.0	0.82	---
29110.687500	42.61	74.00	31.39	150.0	H	324.0	0.57	---
32088.937500	44.66	74.00	29.34	150.0	H	111.0	1.71	---



Critical_Freqs

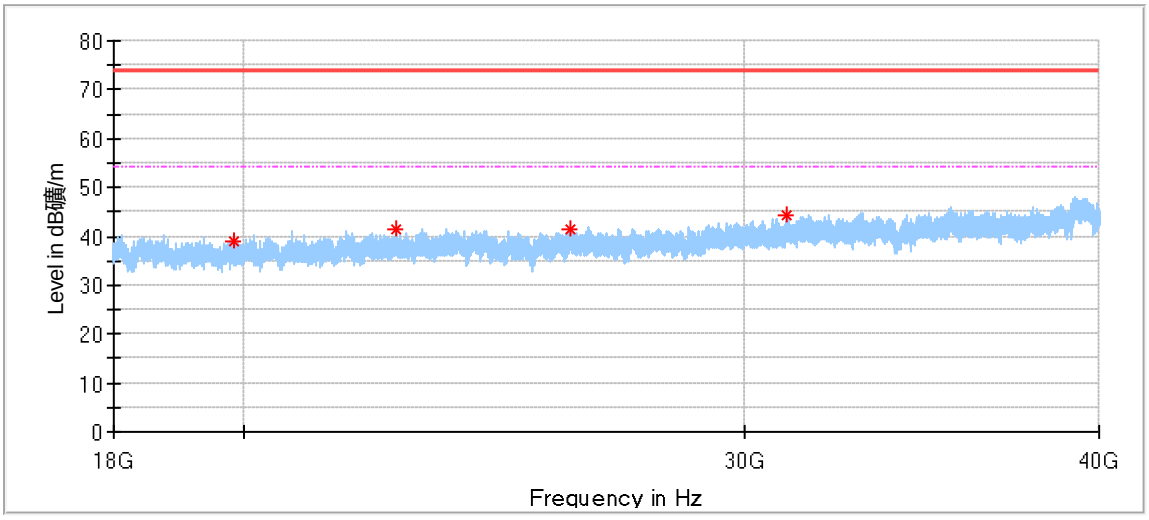
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
23794.250000	41.08	74.00	32.92	150.0	V	345.0	-0.18	---
27464.125000	42.08	74.00	31.92	150.0	V	234.0	1.07	---
29577.500000	43.40	74.00	30.60	150.0	V	264.0	0.64	---
32398.312500	44.95	74.00	29.05	150.0	V	345.0	1.13	---

DH5_Middle Channel:



Critical_Freqs

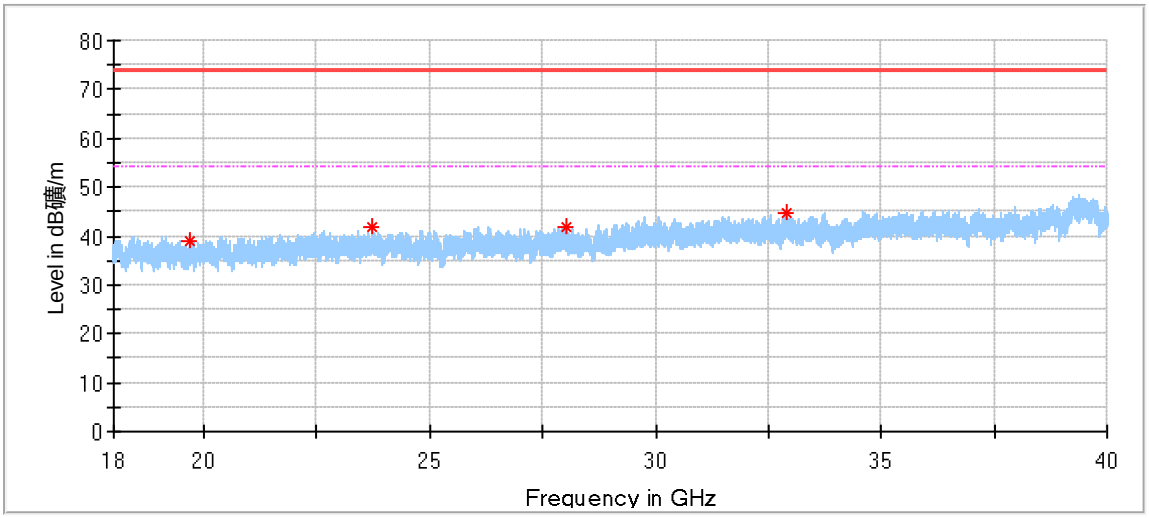
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
20388.375000	40.27	74.00	33.73	150.0	H	292.0	-3.19	---
23816.250000	41.44	74.00	32.56	150.0	H	0.0	-0.18	---
28736.000000	42.72	74.00	31.28	150.0	H	350.0	0.22	---
35434.312500	45.60	74.00	28.41	150.0	H	48.0	2.87	---



Critical_Freqs

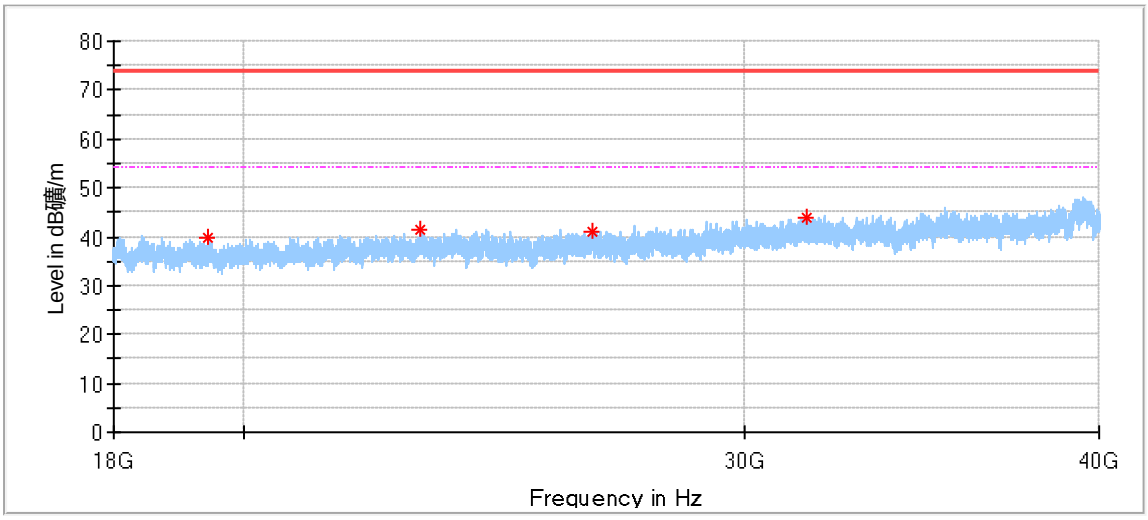
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
19856.937500	38.80	74.00	35.20	150.0	V	78.0	-3.96	---
22644.062500	41.39	74.00	32.61	150.0	V	246.0	-0.79	---
26053.375000	41.31	74.00	32.69	150.0	V	185.0	0.83	---
31074.187500	44.51	74.00	29.49	150.0	V	124.0	0.75	---

DH5_High Channel:



Critical_Freqs

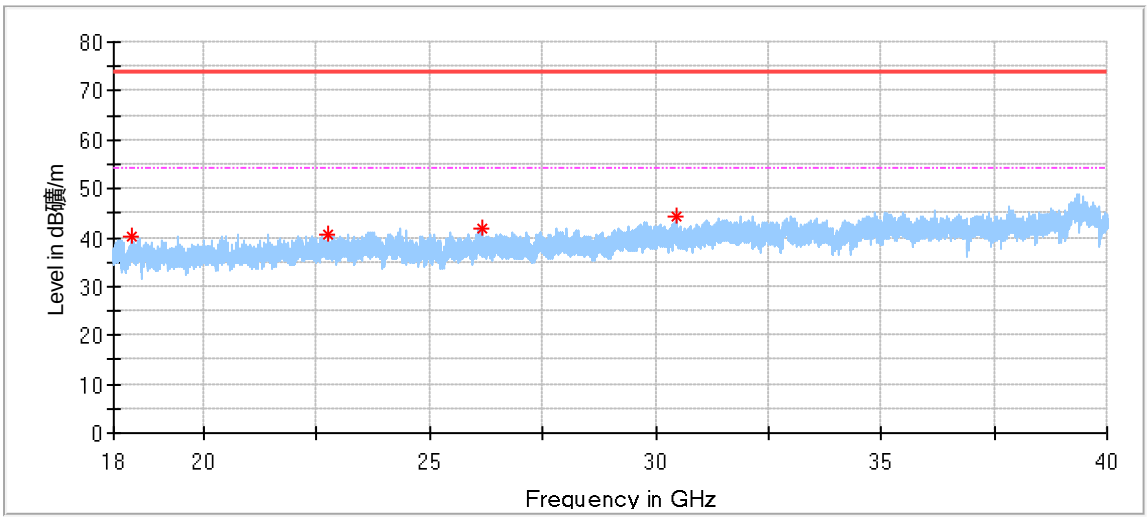
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
19698.812500	39.17	74.00	34.83	150.0	H	15.0	-4.12	---
23728.250000	41.88	74.00	32.12	150.0	H	201.0	-0.22	---
28010.000000	41.79	74.00	32.21	150.0	H	216.0	0.72	---
32910.500000	44.67	74.00	29.33	150.0	H	185.0	1.09	---



Critical_Freqs

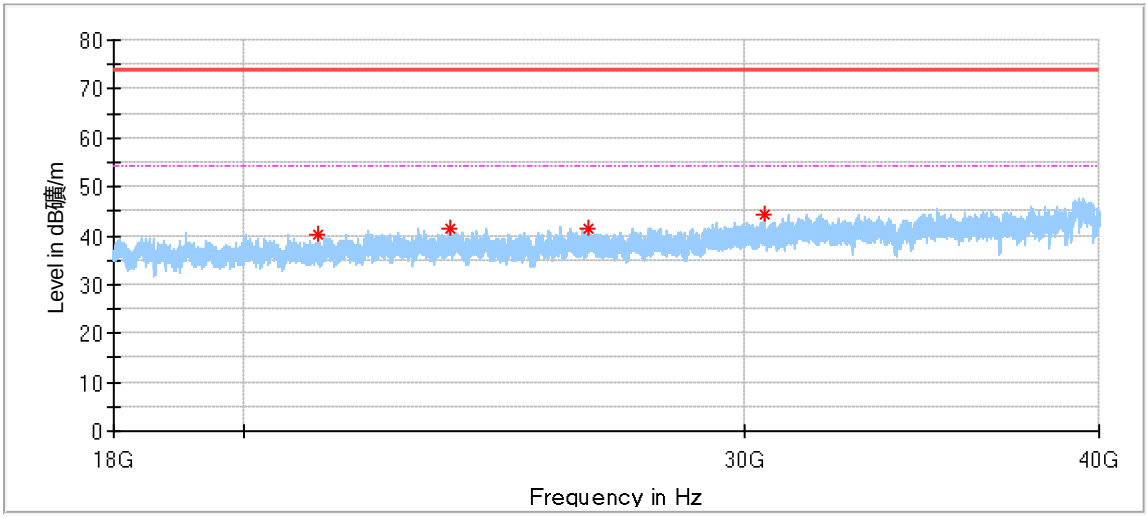
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
19429.312500	39.84	74.00	34.16	150.0	V	202.0	-4.14	---
23068.250000	41.33	74.00	32.67	150.0	V	187.0	-0.64	---
26533.250000	40.96	74.00	33.04	150.0	V	171.0	1.28	---
31546.500000	43.99	74.00	30.01	150.0	V	312.0	1.50	---

3DH5_Low Channel:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
18415.250000	40.12	74.00	33.88	150.0	H	0.0	-4.49	---
22741.000000	40.79	74.00	33.21	150.0	H	48.0	-0.77	---
26176.437500	41.87	74.00	32.13	150.0	H	338.0	0.80	---
30478.125000	44.26	74.00	29.74	150.0	H	292.0	1.00	---



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
21232.625000	40.25	74.00	33.75	150.0	V	260.0	-2.29	---
23637.500000	41.41	74.00	32.59	150.0	V	6.0	-0.32	---
26430.125000	41.27	74.00	32.73	150.0	V	0.0	1.15	---
30486.375000	44.47	74.00	29.53	150.0	V	138.0	1.01	---

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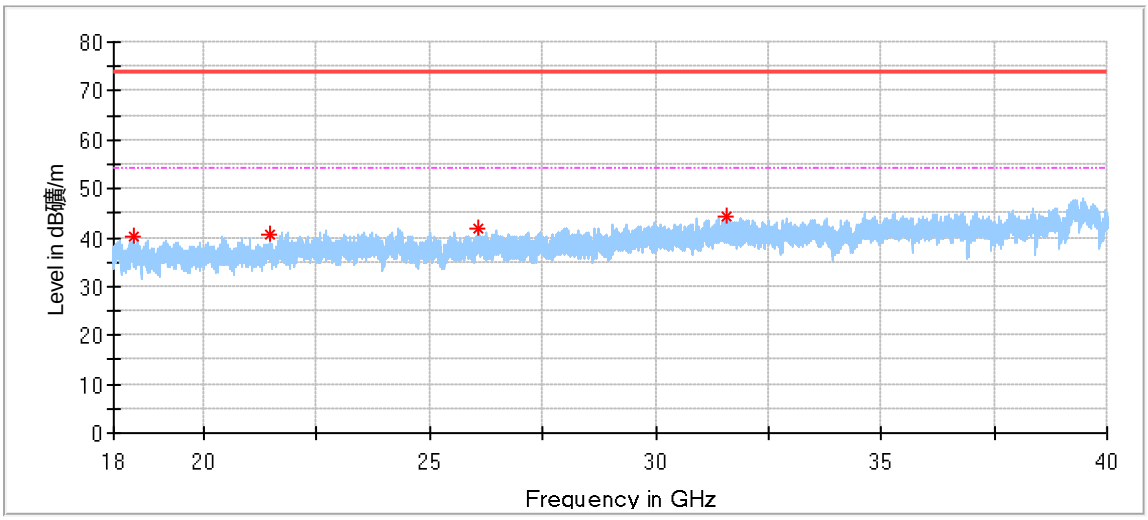
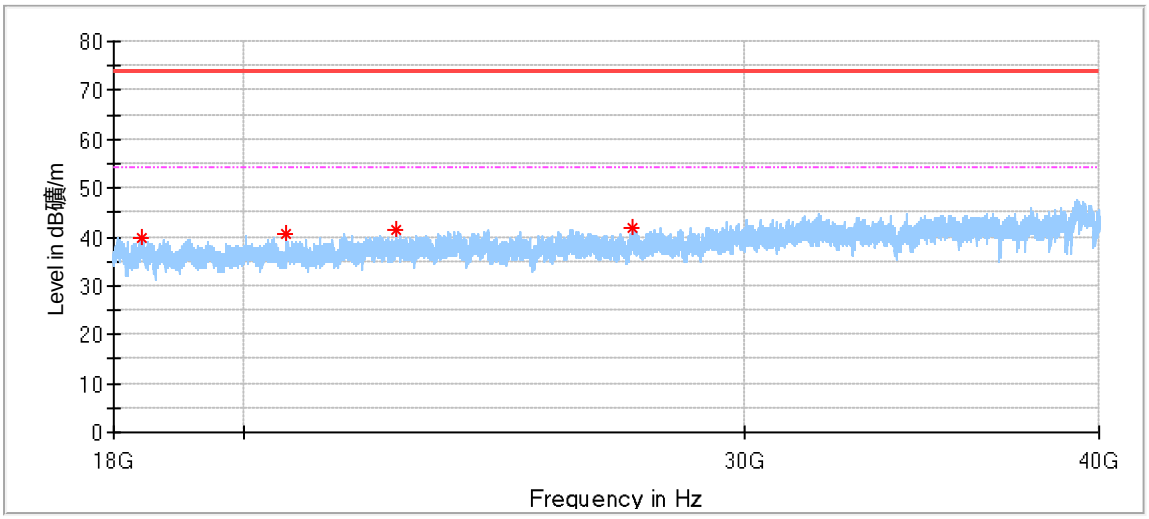
3DH5_Middle Channel:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
18450.312500	40.23	74.00	33.77	150.0	H	292.0	-4.45	---
21453.312500	40.68	74.00	33.32	150.0	H	4.0	-2.00	---
26067.125000	41.68	74.00	32.32	150.0	H	308.0	0.83	---
31574.687500	44.19	74.00	29.81	150.0	H	357.0	1.48	---



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
18407.000000	39.84	74.00	34.16	150.0	V	0.0	-4.50	---
20690.187500	40.48	74.00	33.52	150.0	V	0.0	-2.80	---
22632.375000	41.38	74.00	32.62	150.0	V	78.0	-0.80	---
27425.625000	41.93	74.00	32.07	150.0	V	0.0	0.94	---

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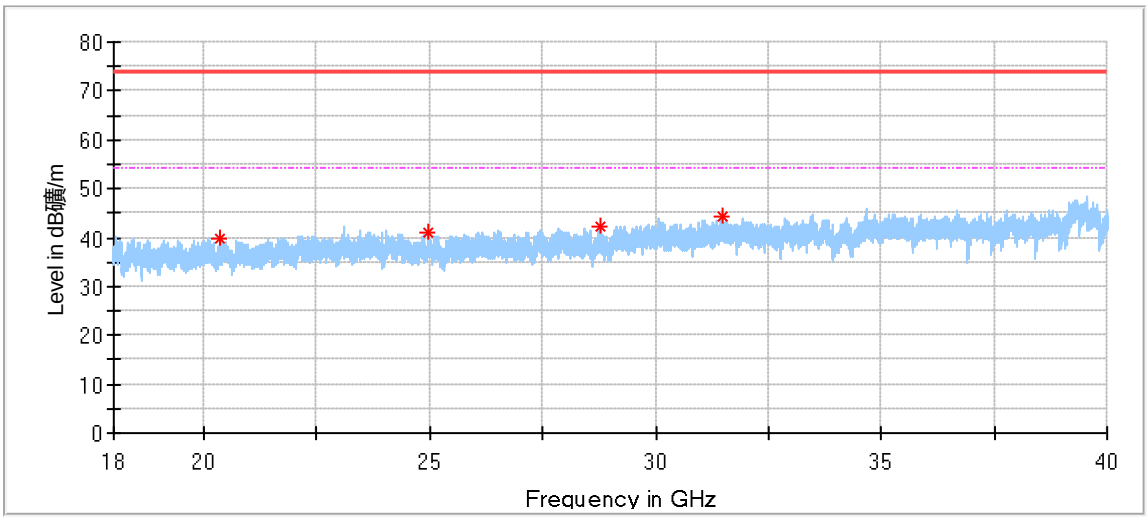
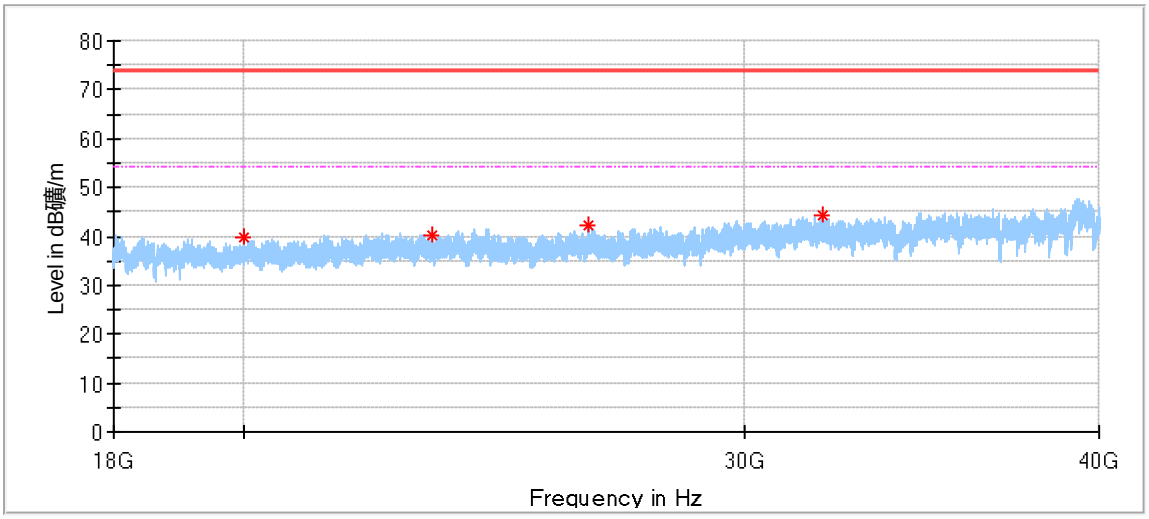
3DH5_High Channel:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
20343.000000	39.82	74.00	34.18	150.0	H	15.0	-3.24	---
24983.625000	40.94	74.00	33.06	150.0	H	359.0	-0.31	---
28796.500000	42.22	74.00	31.78	150.0	H	216.0	0.30	---
31501.125000	44.23	74.00	29.77	150.0	H	295.0	1.53	---



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
19999.937500	39.60	74.00	34.40	150.0	V	263.0	-3.82	---
23291.687500	40.24	74.00	33.76	150.0	V	295.0	-0.52	---
26434.250000	42.42	74.00	31.58	150.0	V	48.0	1.16	---
31992.000000	44.17	74.00	29.83	150.0	V	202.0	1.69	---

Remark:
Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss

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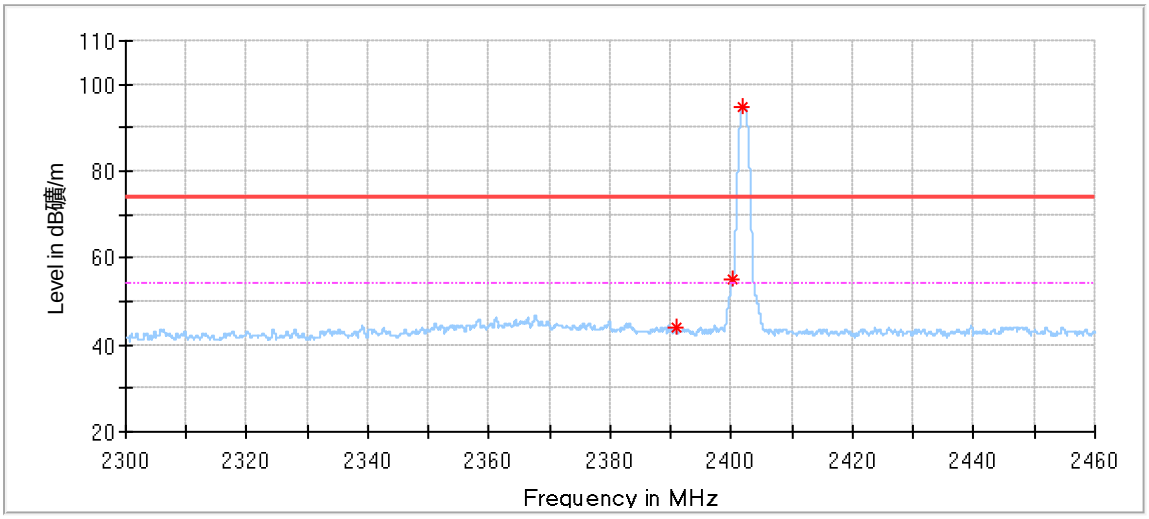
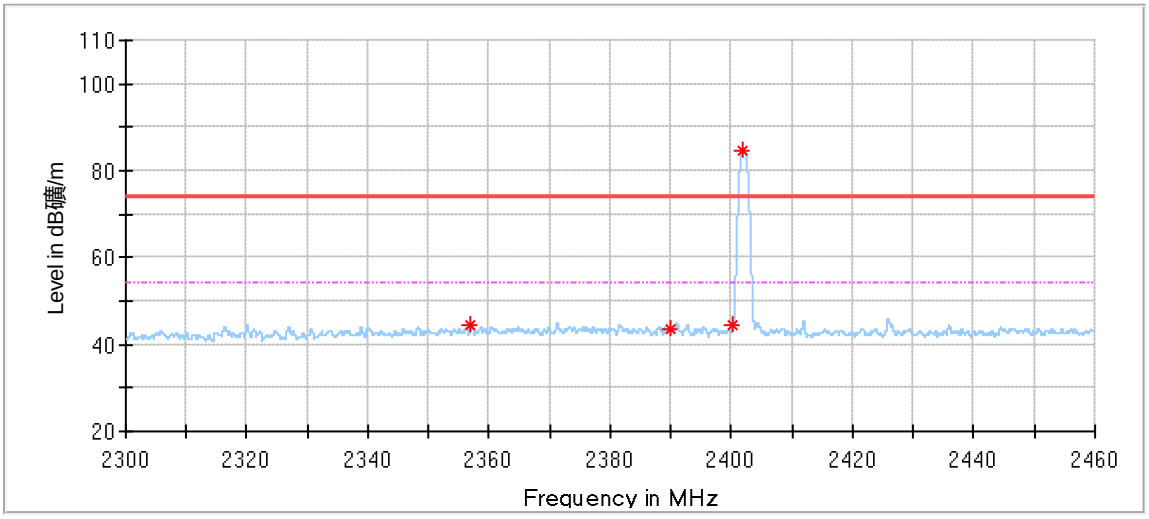
Restricted bands of operation. test result as below:
DH5_Low Channel:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2390.784000	43.92	74.00	30.08	150.0	H	147.0	-3.05
2400.176000	55.08	74.00	18.92	150.0	H	197.0	-3.03



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2356.976000	44.53	74.00	29.47	150.0	V	318.0	-3.34
2390.000000	43.33	74.00	30.67	150.0	V	94.0	-3.05
2400.288000	44.50	74.00	29.50	150.0	V	213.0	-3.03

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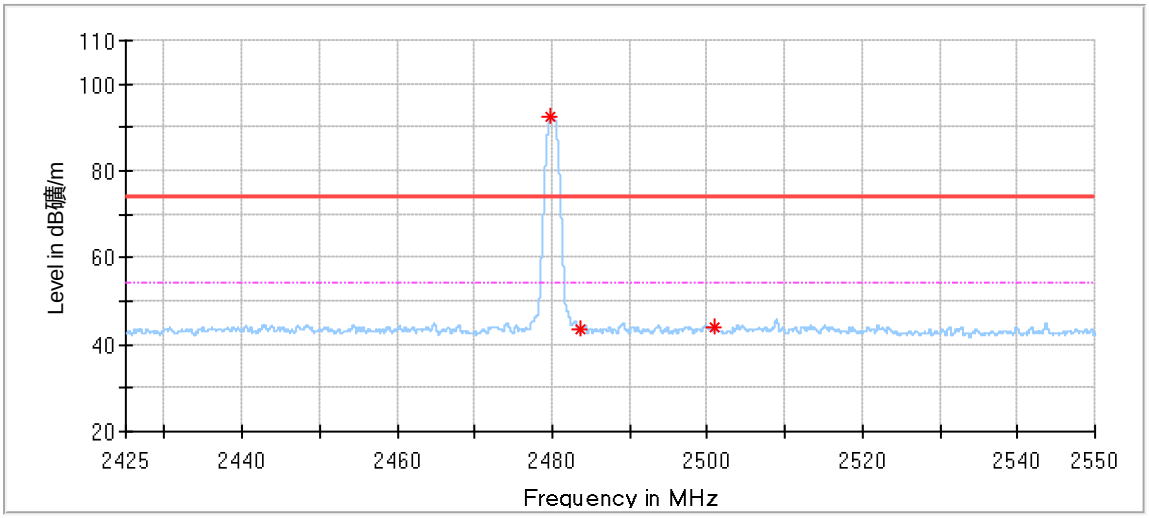
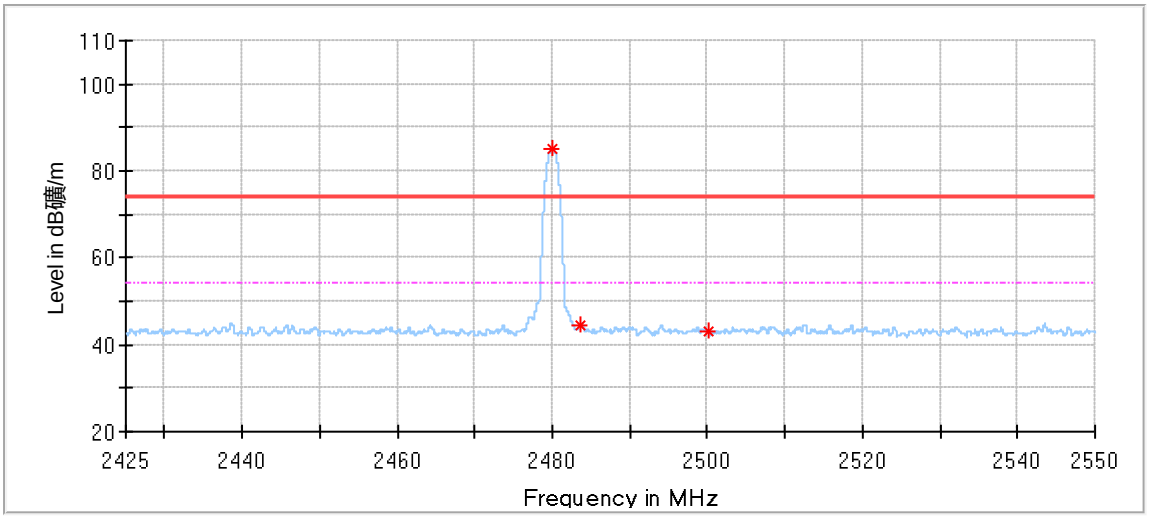
DH5_ Hight Channel:



Critical_Freqs

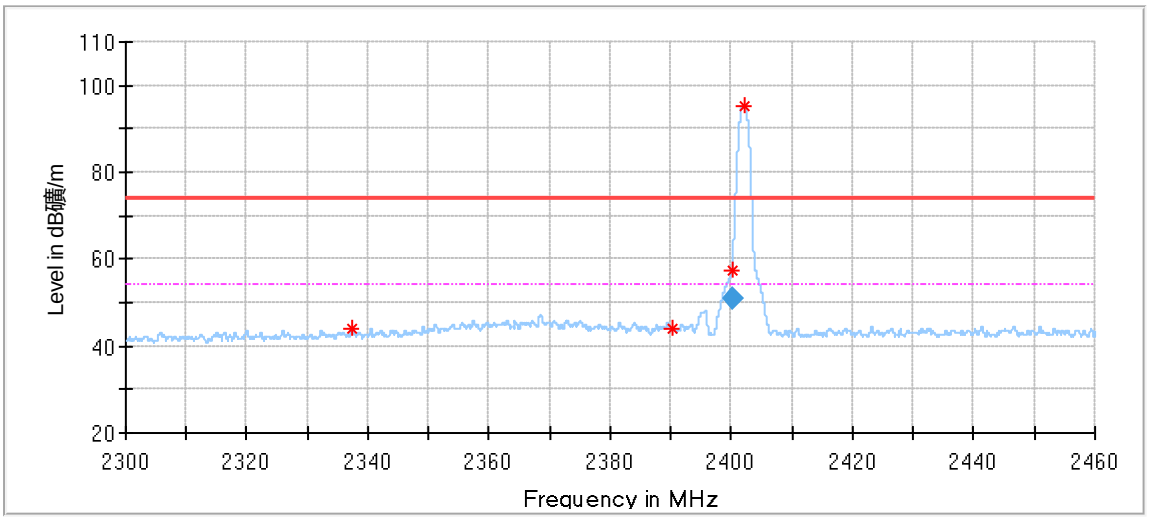
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.500000	43.34	74.00	30.66	150.0	H	196.0	-3.06
2500.850000	43.98	74.00	30.02	150.0	H	50.0	-3.16



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.512500	44.49	74.00	29.51	150.0	V	211.0	-3.06
2500.137500	42.95	74.00	31.05	150.0	V	238.0	-3.16

3DH5_Low Channel:

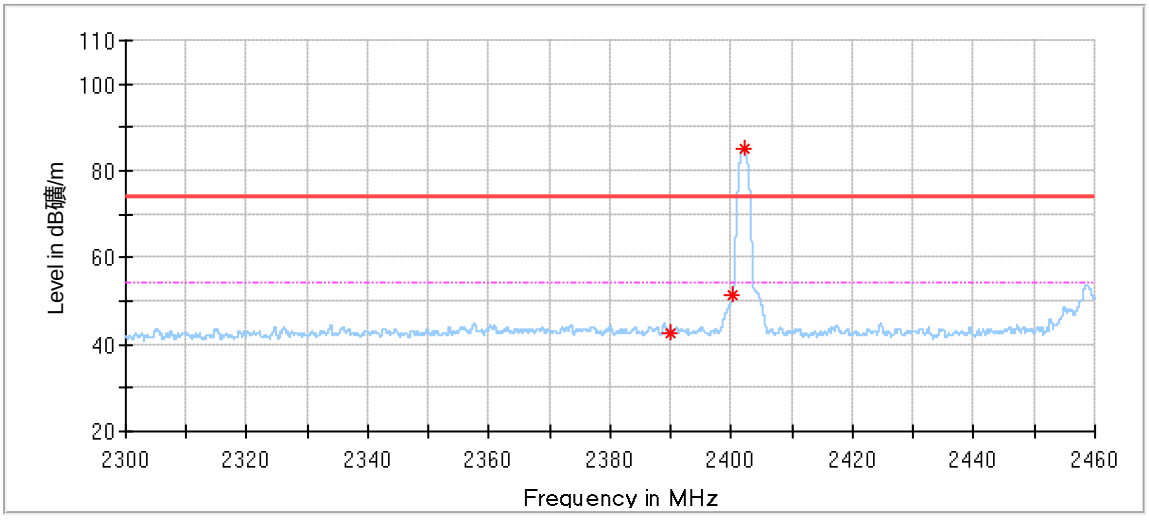


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2337.408000	44.05	74.00	29.95	150.0	H	266.0	-3.55
2390.400000	43.86	74.00	30.14	150.0	H	235.0	-3.05
2400.032000	57.46	74.00	16.54	150.0	H	214.0	-3.03

Final_Result

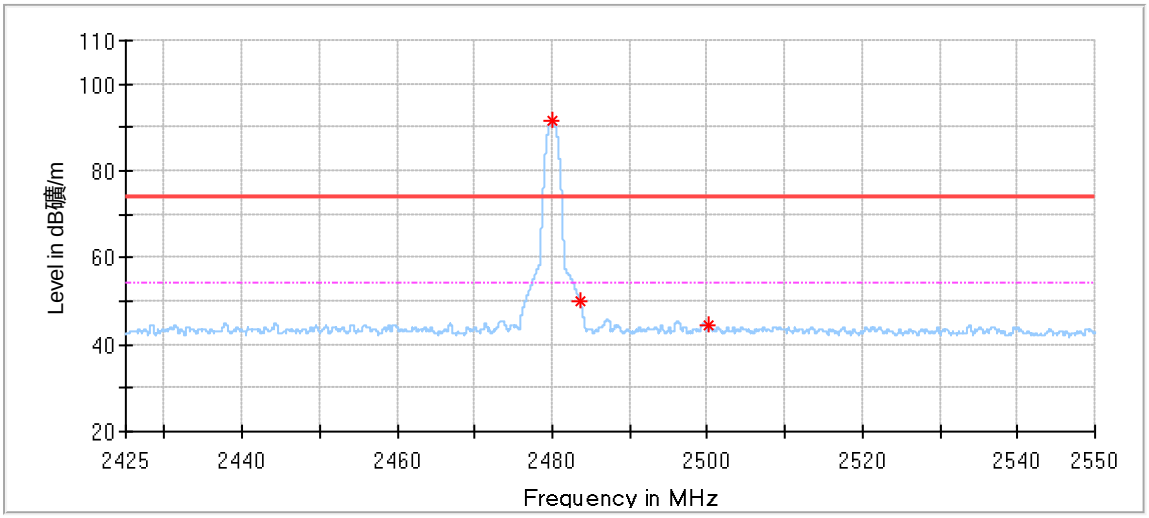
Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2400.032000	50.75	54.00	3.25	150.0	H	214.0	-3.03



Critical_Freqs

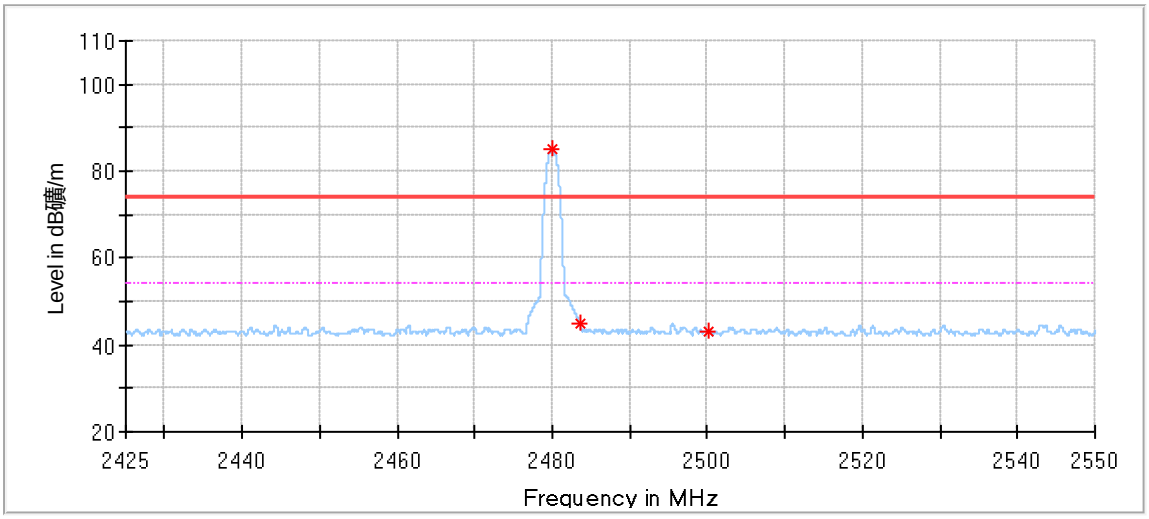
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2390.080000	42.74	74.00	31.26	150.0	V	155.0	-3.05
2400.208000	51.48	74.00	22.52	150.0	V	217.0	-3.03

3DH5_ Hight Channel:



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.550000	49.87	74.00	24.13	150.0	H	196.0	-3.06
2500.200000	44.26	74.00	29.74	150.0	H	223.0	-3.16



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.575000	44.71	74.00	29.29	150.0	V	222.0	-3.06
2500.137500	43.00	74.00	31.00	150.0	V	31.0	-3.16

10 Test Equipment List

List of Test Instruments

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	68-4-74-19-002	102590	1	2025-5-13
LISN	Rohde & Schwarz	ENV216	68-4-87-19-001	102472	1	2025-5-12
LISN	Rohde & Schwarz	ENV4200	68-4-87-14-001	100249	1	2025-5-13
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2025-5-11
Cable	OUQIAO	RG142	68-4-90-19-005-A20	----	----	----
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version10.35.02	N/A	N/A
Shielding Room	TDK	CSR #2	68-4-90-19-005	----	3	2025-10-15

Radiated Emission Test (9kHz-30MHz)

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 7	68-4-74-19-001	102176	1	2025-5-13
Loop Antenna	Rohde & Schwarz	HFH2-Z2	68-4-80-14-006	100398	1	2025-7-24
Cable	HUBER-SUHNER	RG214	68-4-90-14-001-A21	----	----	----
3m Semi-anechoic chamber	TDK	SAC-3 #1	68-4-90-14-001	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-14-001-A10	Version10.35.02	N/A	N/A

Radiated Emission Test (30MHz-1GHz)

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2025-5-13
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	1	2025-2-22
Attenuator	Mini-circuits	UNAT-6+	68-4-81-21-002	15542	1	2025-5-11
Cable	OUQIAO	18DLB5-NMNM-7000	68-4-90-19-006-A22	----	----	----
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A	N/A

Radiated Emission Test (1GHz-18GHz)

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2025-5-13
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	1	2025-4-10
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	1	2025-5-11
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-002	100746	1	2025-5-11
Cable	OUQIAO	18DLB5-NMNM-7000	68-4-90-19-006-A22	----	----	----
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A	N/A

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Radiated Emission Test (18GHz-40GHz)

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2025-5-13
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2025-7-2
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	1	2025-7-17
Cable	JUNFLON	MWX241	68-4-90-19-006-A21	----	----	----
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A	N/A

RF Conducted Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Signal Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	1	2025-5-11
RF Meas. and Switch Matrix Unit	TST PASS	TSCB3023R2	68-4-93-23-001	2811685c	1	2025-5-11
Cable	JUNFLON	J12J103539	68-4-90-19-003-A20	----	----	----
Test software	TST PASS	TST PASS	68-4-93-23-001-A03	Version 2.0	N/A	N/A
Shielding Room	TDK	TS8997	68-4-90-19-003	----	3	2025-10-15

11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted Emission in new shielding room (68-4-90-19-005) 9kHz-150KHz	3.56dB
Uncertainty for Radiated Emission in 3m chamber (68-4-90-14-001) 9kHz-30MHz	4.69dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 30MHz-1000MHz	Horizontal: 4.80dB Vertical: 5.91dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 1000MHz-18000MHz	Horizontal: 5.40dB Vertical: 5.40dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) above 18000MHz	Horizontal: 5.10dB Vertical: 5.10dB
Uncertainty for Conducted RF test with TS 8997	RF Power Conducted: 1.31dB Frequency test involved: 0.6×10^{-8} or 1%

Measurement Uncertainty Decision Rule:
Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.4.3 and 4.5.1.

---THE END OF REPORT---

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